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INTRODUCTION

TO

// SPECULATIVE PHILOSOPHY //

And Logic.

By A. VERA,

PROFESSOR OF PHILOSOPHY IN THE UNIVERSITY OF NAPLES,

Formerly Professor of Philosophy in the University of France.

(Reprint from the Journal of Speculative Philosophy.)

ST. LOUIS, MO.
GRAY, BAKER & CO.
1875.

PROSPECTUS.

THE JOURNAL OF SPECULATIVE PHILOSOPHY.

PUBLISHED QUARTERLY IN ST. LOUIS, MISSOURI.

It is intended as a vehicle for such translations, commentaries, and original articles, as will best promote the interests of Speculative Philosophy in all departments.

TERMS OF SUBSCRIPTION.

Three dollars per volume; single number, 75 cents.

Vols. I. and II., bound in one volume in muslin, will be sent post paid mail for \$5.00.

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Back volumes (unbound) may be had at \$2.00 per volume.

To English subscribers the price is 16s. per volume, 4s. per number.

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All subscriptions (within the United States) should be addressed to the Editor,

WM. T. HARRIS, Box 2398, St. Louis, Mo.

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INTRODUCTION

TO

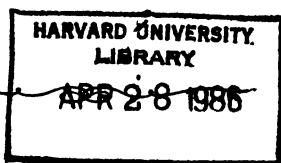
Speculative Logic and Philosophy.

BY

A. VERA,

PROFESSOR OF PHILOSOPHY IN THE UNIVERSITY OF NAPLES,

Formerly Professor of Philosophy in the University of France.



.C ST. LOUIS:

R. P. STUDLEY COMPANY, PRINTERS, 221 N. MAIN ST.

1873.

Phil 4265.3.30 *Nov. 1912*
From the
President's office.

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P R E F A C E.

This book was written some fifteen years ago during my stay in England. Events having called me back to my native country, and, being engaged in other publications and my professional duties, I did not meet with, nor seek for, an opportunity of publishing it. Now this opportunity has been kindly afforded me by my honored and valued friend Mr. WM. T. HARRIS, to whom Hegelianism is greatly indebted for having boldly set up its banner, and, by his and his fellow-workers' labors and perseverance, opened to it a new and wide field on the young and vigorous American soil.

My object in writing this book was not to expound the Hegelian doctrine, but, as it is indicated by its title, to pave the way to the right understanding of it, and to enable the mind to reach the region of the Hegelian speculation and to grasp the Hegelian idea—I mean the idea as it has been conceived and demonstrated by Hegel in the concrete and systematic unity of its nature and existence. I make this statement in order that the reader should not expect to find in this book that which it is not intended for, and also to remind him that a book, and more especially a philosophical book, cannot be rightly appreciated and fully understood unless taken as a whole, i.e. here with the Hegelian doctrine in general, and, if I am allowed to speak of myself, with my other writings.

A. VERA.

MONTREUX (SUISSE), August, 1872.

ANALYSIS.

CHAPTER I.—*Preliminary View and Outlines of Formal Logic.*

CHAPTER II.—*Formal Logic abstractly Considered.*

CHAPTER III.—*Legitimate Logic: Science; Thought.*

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INTRODUCTION

TO

Speculative Logic and Philosophy.

Preliminary Remarks.

That there is a Logical science is admitted on all hands, and that this science is of paramount importance for purely speculative as well as for practical purposes is a point upon which all men seem to agree. For although in practical life men are mostly guided by opinion, by interest, by passion and caprice, yet there is not one who is not anxious to strengthen and develop his logical powers—"the faculty of reasoning" as it is generally termed—either to apply it to the peculiar object of his industry, or to outdo the adversaries whom every one has to meet and to contend with in the struggles of life. This it is which, with Mathematics, makes Logic the most popular amongst abstract sciences. For every one feels, as if by instinct, that to act rightly one must think rightly, and consequently that the science which inquires into the rules of thought must be worthy of the attention of all rational beings; and as there is neither science nor art, nor any practical avocation, which is not founded upon thought, and does not require the normal exercise of the logical faculties, the conclusion naturally drawn therefrom is that Logic is a science embracing within its boundaries the whole range of human knowledge and activity.

But if Logic, when considered in its abstract notion, takes so high a standing even in popular opinion, it little answers

the general expectation when considered in its present shape and as embodied in the various logical treatises; and this accounts for the fact of Mathematics having seen the number of its worshippers increased, and the field of its researches and application becoming more and more enlarged, whilst Logic has fallen into neglect and decay, and if still taught in colleges and schools it is more owing to the tradition of the scholastic *curriculum* than to the earnest desire of becoming acquainted with it; and this in spite of its intrinsic and acknowledged importance, not only with respect to other sciences in general, but to Mathematics itself, mathematical knowledge supposing the existence and the application of Logical laws. The fact is that this science, the object of which is to strengthen and develop the rational powers of the mind as it is now constituted, seems rather to have been intended to mislead and vitiate them. For its theories consist of nothing but an aggregate of empty formulas, of arbitrary rules, and artificial proceedings, which are neither consistent with themselves nor with the things to which they are applied; and it is only by false teaching and false habits of thought, and by a distortion of facts, that we are brought to think that *concrete objects*, either physical or metaphysical, are apprehended by our mind through, and according to, laws as they are laid down by Logic. For if the matter be truly investigated it will be seen that they are apprehended and known in spite of and in contradiction to them.

The failures of Logic have long been felt by philosophers, and several attempts have been made, since Ramus, to remodel this science. But I do not hesitate to say that all attempts have failed, and not only failed but are merely an inferior reproduction of the theories they propose to overthrow and replace. For there is nothing in Bacon's *Organon* or Descartes' philosophy,* as far as the fundamental principles of Logic are concerned, which could not be found in the Aristotelian *Organon*; and those who have seriously attended to these matters, and whose judgment is not biassed by national prejudices and vanity, will agree, I trust, with me in saying that the Aristotelian *Organon* surpasses all subse-

* *Discours sur la Méthode et Règles pour bien conduire ses Pensées.*

quent logical theories by the range and accuracy of its inquiries, and by the scientific character with which it is stamped. As to Bacon's *Organon*, the long cherished delusion that he had discovered a method and logical proceedings unknown to Aristotle and ancient philosophers has been exploded by modern criticism and a more accurate knowledge of ancient philosophy.

The common failure of all logical theories—of the Aristotelian as well as others, but more especially of the latter than of the former, as will be shown in the course of this inquiry—the error which has precluded the authors of these theories from establishing Logic on a sound and firm basis, and which vitiates, as it were, the whole structure, is to be found in the very principle from which they start, in the very notion they form of Logical Science. For they have, one and all, considered Logic as a *formal* science, as a science whose business it is to analyze and describe the merely *subjective forms* of thoughts, i.e. forms that possess a value and meaning as far as the mind is concerned, but which have no *objective* bearing or consubstantial connection whatever with the things the mind apprehends and knows through them.

This is the view philosophers have generally taken of Logic, and starting from this notion they have curtailed it, and stripped it, as it were, of all substance, leaving nothing but a mere *form*, which, for the very reason that it has been severed from its substance and considered apart from concrete and real objects—either experimental or metaphysical—is anything but a *rational form* and *organon* of truth. Indeed, from Aristotle down to the present time, it would seem that Logicians, instead of enlarging and completing the field of researches marked out by the Greek philosopher, have exerted all their ingenuity in compressing it into a narrower compass by cutting off some of its essential branches and reducing it to its *minimum*. Hence the arbitrary and superficial distinctions of *Metaphysical* and *Logical Truth*, of *Reason* and *Reasoning*, of Logic as the science of *mere Possibilities* and Metaphysics as the science of *eternal and absolute Realities*—distinctions which, whilst breaking asunder the unity of the mind and knowledge, and with the unity of knowledge the unity also of things, have made of Logic a

sort of *caput mortuum*, wherein the mind is unable to derive any rational guide or real criterion either for practical or speculative purposes.

Such is even at the present moment the position of Logical Science, though it is more than half a century since the renovation of Logic was accomplished by one of the most extraordinary thinkers that ever existed. I mean Hegel.

When Hegel's *Logic* appeared* it was hailed in Germany by the philosophical world with admiration; nay, with enthusiasm. It was felt that it would do away with old Logic, and inaugurate a new era not only for Logic and Philosophy, but for Science in general. For Logic being a universal science, there is no province of knowledge to which its influence does not extend; there is no theory, nor thought, relating either to God, or to Nature, or to ourselves, which does not involve some logical notion or law; and consequently the renovation of Logic must needs carry with it new mental habits and criteria, new methods and principles, in all provinces of science.

That Hegel's Logic, when better known, when a blind attachment to old formulas and a sort of mechanical use of them shall have given way before rational and demonstrative principles, will supersede old Logic, does not leave a shade of doubt in my mind. And the objection raised by some against the Hegelian philosophy, namely, that this philosophy which once held sway has now been falling off; that his disciples are scattered and discouraged, and hardly acknowledge the doctrine of their master; that consequently this doctrine *a fait son temps*, and that it was a transitory phase of the human mind, a bold but sterile attempt to explain the absolute laws of the Universe,—this objection has, in my opinion, very little, if any, value. To those who assume that the Hegelian philosophy has lost its influence, may be opposed the contrary assumption. It may be said that what it has lost in *intensity* it has acquired in *extent*, and that its influence which was formerly confined to Germany is now spread all over Europe and beyond the seas, as is attested by private and public accounts, and by publications relating directly or in-

* It was published in Nuremberg in 1812.

directly to the Hegelian philosophy.* Moreover, were the objection correct as to its influence being on the wane, the inference which some would draw therefrom against its intrinsic worth and its future action and development does not follow at all from the premises. The same has happened to the Hegelian philosophy as to that of Plato and Aristotle, and what must happen to all comprehensive and profound systems, and, we may add, to all great historical events. There is a reaction and there is a stop. There is a reaction brought about by various causes, namely: by the past; by old habits, interests, and tradition; by ignorance, indifference, and the difficulty of embracing the full and real meaning of a theory; and also by impatience and disappointment at not seeing ideas immediately realized. But this is the eclipse and not the evanescence of the planet. Plato's and Aristotle's philosophy was followed, or, as the anti-Hegelian would say, superseded, by the Stoic, the Epicurean, &c. &c.; yet this did not prevent the former from reviving as vigorously—nay, more vigorously, perhaps, than when it first came forth from the brain and mouth of their immortal authors. For, setting aside the Alexandrian school and the Roman philosophy, which are chiefly developments or reproductions of Platonism and Aristotelianism, the influence and doctrines of the latter were never more widely spread, or more indisputably established, than in the middle ages and at the *renaissance*; and even at the present day, in spite of the disdainful attacks and pompous promises of Bacon and Descartes, Greek philosophy stands as the foundation of all serious philosophical training, and there are few works upon which of late years more attention and labor have been bestowed by distinguished thinkers, commentators, and editors, than upon Plato and Aristotle. Therefore the momentary obscuration of these great luminaries, far from being a symptom of decline, is the test of their power and vigorous youth, as it shows how vital is the spirit that lives in them, which, like the phoenix from its ashes, comes out from among the ruins

* Mr. Remusat, in the paper "*Un Voyage dans le Nord de l'Italie*," published in the *Revue des deux Mondes* (1st October, 1857), says, "Italy has her Hegelianism. It is the necessity of our time—*c'est la nécessité du temps*." It would be more correct to say—it is the necessity of the human mind.

that time and generations heap up to obstruct their passage, breathing an ever new and immortal life.

That Hegel belongs to the family of these extraordinary and divine-born thinkers, and that his theories will stand the proof of time, cannot, in my opinion, have the slightest doubt in an unprejudiced mind that will give the subject sufficient attention. For his marvellous speculative power, the vast and profound grasp of his mind embracing all provinces of science, and the faculty—unequalled by any other thinker, not excepting Plato and Aristotle—of systematizing knowledge, and deducing and connecting ideas, assigns him one of the highest places among philosophical geniuses.

CHAPTER I.

§ 1. *Definition of Logic.*

Nothing, perhaps, shows better the unsatisfactory state and the inadequacy of Logical Science than the various and conflicting opinions as to its object and the exact limits of its province. For to some it is a system of rules, a method for forming clear ideas, and for guiding Reason;* to others it is the Science of Argumentation and Reasoning, which faculty they carefully distinguish from Reason.† Kant considers Logic as a *formal* science, the science of the necessary *forms* or laws of thought, and, according to his own expression, of the general use of the Understanding, independent of all particular object or subject-matter, supplied either by Reason or by Experience.‡ There are those who exclude from Logic all questions relating to Ideas, their origin and their objective meaning; there are others, on the contrary, who not only attribute them to Logic, but who go so far as to include in it the *Problem of Certainty*, besides other miscellaneous matters, as the problem of probability, of miracles, &c.§

This divergence of opinion, and this uncertainty as to the precise object and limits of its province, which would be a source of error in any other science, by misleading judgment, and by producing false consequences and applications, is

* Descartes and Watts.

† This is the view more commonly taken of Logic.

‡ Kant's Logic, published by Jaesche.

§ The Logic of Port Royal, for instance.

much more so in a science which is held out as the organon of inquiry, as the method by which truth is to be discovered and tested. For the confusion and error that creep into this the universal science will, for this very reason, invade all the other branches of knowledge.

The difficulty of forming a correct notion of Logic, of its limits and real bearing, arises from various causes, but chiefly from the absence of a systematic knowledge, and of a close inquiry into the nature of *Form*, and of Logic itself. In fact, where there is no system, i.e. where there is not a whole, and where the parts and the whole are not rationally adjusted and connected together, there is only a desultory and fragmentary knowledge; and a particular science which is not systematically arranged, and is not the part of a whole, must necessarily mistake its object, its limits, and the relation in which it stands to other sciences. And so it is with Logic. For this science is handled irrespectively of the relation in which it stands to other sciences, or, when started, the question is answered in a vague and superficial manner, as, for instance, that Logic being the Science of Reasoning, and, as reasoning is needed in all sciences, Logic must necessarily bear upon all sciences; but, what is the nature of this relation, how far and in which way Logic is connected with other sciences, which is the limit that separates and which is the nexus that unites them,—this, the most important point, Logicians do not state; or if, to give a more accurate definition of Logic, they add that it is the Science of the *Form and Method* by which we dispose our thoughts in order to attain Truth, here too we are left in ignorance as to the nature of this Form and Method, and of this relation to the objects of Thought; whether, for instance, there is between the object—finite or infinite, physical or metaphysical—and the *Form* a community of essence, or whether the *Form* is a mere *subjective organon*, a contrivance for the better arrangement of our conception; whether the *Form* is eternal or temporal, and, if temporal, how eternal objects can be known through it; thus overlooking or leaving unanswered the questions that are most important, and without which no correct notion of Logic can be formed.

Let us, then, in order to arrive at the right conception of

Logic, inquire into the nature of this science, by pointing out, in the first place, the principles upon which old Logic is founded, and the inadvertence and misconception which have brought forth these principles. Logic must be established.

§ 2. *Outlines of Formal Logic.*

That Logic is a universal science is a point on which all philosophers agree. In fact, whether Logic be the Science of *Forms*, or the Science of *Reasoning*, the unity of the mind as well as the unity of science requires that there should be a universal science, extending to all departments of thought and knowledge. But if, on the one hand, it is a universal science, it must, on the other, have its own peculiar object, its own peculiar field of researches; it must, in other words, be a particular Science. For were it a universal Science only it would be the only Science, and all other sciences would be but different parts and divisions of Logic. The question, therefore, is how Logic can be both a universal and a particular science, to what extent and in what sense it embraces all other sciences, so as the latter may be considered as various branches of Logic, and in what sense it constitutes a science *sui generis*, having a distinct and limited object.

Now, when we analyze thought, we find two elements in all thoughts, namely, the *Thing* itself—either merely thought, or signified externally by words—and the *manner* in which the various things are disposed and connected in and by thought; there are, in other words, what has been called the *Matter* or *Contents*, and the *Form* of Thought. For instance, if in the proposition "*Man is mortal*" we do not consider in any way what relates either to *man* or to *mortal*—whether there is a man or what it is, whether there is a mortal thing and in what mortality consists, &c.—but only the way in which these two and all similar terms are or may be connected, we will have the *general Form* of this proposition. Again, by the same analytical process we will discover in an argument the same elements, i.e. the *Terms* and the *Form*, through which this relation is apprehended by the mind; and if we apply this process to the various forms through which we apprehend truth, we would obtain the fundamental principles upon which old Logic stands; so that we would have, on the one

hand, the *matter of Thought* and the Sciences—such as Metaphysics and Natural Sciences—which inquire into the *matter*, and, on the other, the *Form* of thought, and the Science which inquires into the *Form*, namely, Logic.

The question is now this: are these the rational and real boundaries of Logic; and how can Logic, or any other Science whatever, be constituted if all *matter* of knowledge is excluded therefrom? And even granted that Logic is the Science of *Form*, is the Form such as it has been conceived by old Logic the truly rational Form? In order to place these points in a proper light, let us draw the outline of Logic such as it has been realized to the present day.

As there can be no thought without some defined forms, there must be some general elements of thought. These elements have been called by some logicians *Terms*, by others *Categories* or *Concepts*, by others *Genus* and *Species*.

Now if, from terms or categories, or whatever name they be called, according to what we have stated, we subtract their *objective* and *material value*—be these derived from experience or from Reason—there will be only left their *magnitude* or *quantity*, and Logic will be the Science of the *Quantity of Thought*.* Hence the relation—or, to speak more properly, the confusion—of Logic and Mathematics. For Terms, when stripped of their *contents*, are like numbers and geometrical figures, and their combination may be compared to a numerical proportion or to concentric circles.†

According to this criterion, the essential character of terms will be what logicians call Comprehension and Extension, which are a certain number—a sum—of characters belonging

* If, for instance, from the term *man* we take away the *real existence* and the *qualities* of man, the only character or entity which can possibly remain in *man* will be his quantity, i.e. man considered as a *whole*, or as a *part*, or as an *individual*.

† Euler, for instance, compares syllogisms to three concentric circles, the middle circle playing the part of middle term—(*Letters to a German Princess*). Plouquet identifies *Logic* and *Reckoning*, and, after having converted syllogism into calculation, he concludes by the following words: “Posse etiam rudes mechanice totam logicam doceri, uti pueri arithmetica docentur, ita quidem, ut nulla formidine in ratiociniis suis errandi, torqueri vel fallacis circumveniri possint, si calculo non errant.” It must be said that Leibnitz had already set the example to this superficial and illogical manner of treating Logic by submitting syllogism to combinatory calculation, by calculating the number of combinations into which the proposition may be adjusted in syllogism. (See *Leib. Op. T. II. p. 1.*)

to each term. Let us take, for instance, the term *Tree*. *Tree* is a *genus* and a *species*. It is a genus if we consider the inferior narrower terms—oak, fir, apple, &c.—it contains; it is a species if we consider the superior or wider terms—organic matter, being, &c.—in which it is contained. The aggregate of the former character constitutes its *extension*, the aggregate of the latter its *comprehension*. Hence follows, 1°. that the Comprehension and the Extension are in inverse ratio, and consequently that whilst the one increases the other diminishes, the Comprehension increasing in a series of terms from upwards downwards, and the Extension from downwards upwards; 2°. that if we picture to ourselves the whole series of terms, we shall see that at the one end of the series—the upper end—there is a term having the widest Extension but no Comprehension, and at the opposite end—the lowest end—there is a term possessing the widest Comprehension but no Extension.

Now terms, considered singly and apart from all connection between them, are but indeterminate elements which do not constitute any positive thought. This property they acquire by their mutual association, and by reflecting, as it were, a part of themselves upon each other. Indeed, their own constitution points to this association. For as each term possesses both Comprehension and Extension, each term points to the term of which it forms either the Comprehension or the Extension.

Now the most elementary and fundamental connection of terms is the *Proposition*. The proposition is nothing but the development and (as it were) the actual position of the relation of terms—of the relation virtually implied in each term separately considered; in other words, the proposition is the actual *affirmation* of the twofold elements contained in each term. In the terms “man” and “mortal,” for instance, there is a certain number of characters, some of which constitute their Comprehension and some their Extension. With regard to the term “mortal,” *man* is a part of its Extension; and with regard to the term “man,” *mortal* is a part of its Comprehension: so that these two terms, as parts of a whole—of the whole series of terms and thought—stand in a reciprocal and inverse relation, which relation is affirmed by the insertion of the copula *is*. In the proposition, “Man is

mortal," *man*, being the *species*, constitutes a part of the Extension of *mortal*; and *mortal*, being the *genus*, constitutes a part of the Comprehension of *man*.

Now, as the Proposition evolves itself out of Terms, so likewise the Syllogism evolves out of the Proposition. And as a series of Terms virtually contains a series of Propositions, so a series of Propositions virtually contains a series of Syllogisms. Nay, Syllogism is already contained in Terms, and, like the Proposition, it is but the actual development of the elements involved in Terms. For each term possessing Comprehension and Extension, i.e. being so constituted as to form, on the one side the Comprehension, and on the other the Extension, of other terms, not only points to a Proposition, but to a Syllogism. The terms "man," "mortal," "plant," "white," "good," &c., possessing each of them these twofold sides, may be combined in a syllogism; and they may moreover, each in its turn, be a middle term, a major and a minor term, in different syllogisms.

On these considerations, the fundamental principle of the Syllogistic theory, the *principium de continenti et de contento*—a term that *contains and is contained*—rests. For each term by its Extension—as genus—*contains*, and by its Comprehension—as species—*is contained*; so that each term is, in its turn, a middle term, a major and a minor extreme.

In the syllogism,

"All created beings are mortal:
Man is a created being;
Therefore," &c.,

man is the minor extreme. In the syllogism,

"All men are mortal:
The Europeans are men;
Therefore," &c.,

man is become middle term. In another syllogism it would become major extreme, and so it should be with the other terms.* Thus the whole series of terms is a series of proposi-

* The principle of "*De continenti et de contento*" is more specially applied by logicians to the *middle term*, which contains the *minor extreme*, and is contained in the *major extreme*. But if we take a larger view of the matter, and consider a series of syllogisms, we shall see that not only the middle term of a single syllogism, but all terms, contain and are contained. Let us take A, B, C, and suppose B to the middle term; B would contain and be contained. But B may be also a major or a minor extreme, and A or C a middle term, in another syllogism.

tions and syllogisms, and these latter are only a development of the elementary theory of terms realized as *genus* and *species*, or as *quantities* either containing or being contained in other quantities.

Now the complex of these forms and operations constitutes Method, which, as we have stated, is a mere *subjective organization* of knowledge, an *ensemble* of rules guiding the mind in the discovery of Truth, but being neither Truth itself, nor having any *objective* relation with it; so that when we reason, define, divide, &c., we perform operations which lead the mind to the knowledge of things, but which possess no existence whatever without the mind, nor bear in any manner upon the nature of the things themselves. Now the condition of all thought and knowledge is that these should not deny or (as it were) destroy themselves. Consequently, to the above rules and principles must be added the *principle of Contradiction*, called also (by Kant) the "principle of Identity," which may be enunciated as follows: "A thing must be identical to itself," or "A thing cannot be other than itself at the same time and in the same respect"—a principle which is held out as the highest criterion of knowledge and truth.

These are the main features and principles of old Logic, of the Logic which claims Aristotle for its founder—with what reason we shall see hereafter—which has been for ages and is still officially taught, and forms the frame-work of all logical writings published until Hegel's *Logic*, whatever may be the difference in their external arrangement and some secondary points.

§ 3. *Is Aristotle the founder of Formal Logic?*

Though this question has only an historical and extrinsic value, yet, owing to the greatness of the name, to the influence which his writings exercise, and will exercise in future ages, and to the fact that his logical disquisitions are and will be the starting-point of all logical studies, it is important for the guidance of the student, as well as for historical truth and for science's sake, to bring this point to its proper light, and to see what is Aristotle's true notion of Logic.

That Aristotle did not clearly perceive either the object of Logic, or the link which connects this with other sciences—

with Metaphysics, for instance; that there is a tendency in his theories to reduce all logical principles and operations to the empty formulas and figures of formal Logic, I will readily admit. But it does not follow therefrom that the Greek philosopher considered Logic as a mere science of *subjective forms*, absolutely separating it from what has been subsequently called Ontology and Metaphysics. For the most cursory glance at his writings will convince the reader, that, pursuing, like Plato, the unity of knowledge, he applied himself to connecting Logic with Metaphysics, by placing them on a common ground, and by attributing to them the same order of researches. Thus, after having, in his *Logic*, laid down the *Categories* as principles of *Thought*, in his *Metaphysics* he considers them as attributes of *Being*. It is the same relation he has in view when in both the same writings he examines *the principle of Contradiction*, or when he introduces in his *Analytics* as well as in his *Book of the Soul* his *theory of the Intellect*, which is intimately connected with his theory of Being or Essence—*Entelechia*. Indeed, within the limits of Logic we find Aristotle occupied in defining and enlarging the object of this science, and inquiring into the material and objective meaning of its laws. For after having analyzed the Proposition in its general and indeterminate form, he analyzes it in its more determinate and more objective meaning (in his theory of *Modal*); and after having considered the *middle term* as *Species*, and in its *quantitative* relation with the *extremes* (*First Analytics*), he considers it from the point of view of *Cause* and *Essence* (*Second Analytics*), connecting here also Logic with his ontological theories, and pointing out the *essence* of things as the absolute *middle term* or principle of demonstration, in which the demonstration and the thing demonstrated, the *form* and the *matter* of thought, are intimately blended and raised to the identity of their nature.

This is Aristotle's real conception of Logic, as it is proved by his writings; and those who appeal to him to justify the separation of Logic and Metaphysics, do it either from obstinacy, or from ignorance and want of an accurate and comprehensive survey of his writings.

CHAPTER II.

§ 1. *Formal Logic abstractly considered.*

But, whatever be Aristotle's conception of Logic, the question must be decided on its own merits, and independent of all extraneous argument and historical antecedent. We will, therefore, examine the logical theories first in themselves and abstractly considered, and then in some of their most important applications.

And to begin with Terms, we must ask what they are, and what is the precise meaning attached to them. If they are anything, they are only Ideas, as it will be shown in the course of this inquiry. But formal Logic excludes Ideas from its province, and removes all questions relating to Ideas either to Psychology or Metaphysics. We must then inquire what they are, and what they can be if they are not Ideas. Now the only thing which is left for them to be is to express either certain *qualities* or certain *quantities*, or *genera* and *species*. But, according to formal Logic, Terms and their relations, or rules, as they are called, cannot be *qualities*; for, as qualities belong to the nature of things and constitute a part of it, this would bring Logic on the ground of Ontology. Thus, for instance, the logical element would become a quality of *man*, of *being*, of *mortal*, &c. If terms are not *qualities*, are they *genera* and *species*? If so, they cannot be genera and species, such as the latter exist in nature, or such as we can conceive them to be, namely, endowed with the power of generation, or other kindred, real qualities; for they would cease thereby to be logical elements. If, then, they are genera and species, they are genera and species of another and peculiar kind. They are, and can only be, *quantities* of different magnitude, connected, as all quantities are, by the relation of *more* or *less*; or, as we have already stated, of two quantities, one of which is contained in the other. — A, B, C, D, &c., if they represent neither *Being* (*Ens*) nor *Quality*, must represent *Quantity*, unless they are = 0. Thus formal

Logic is, as we have already stated, the *Logic of Quantity*. But the science of Quantity is Mathematics, and thus either Logic would be a part of Mathematics, or Mathematics a part of Logic, or Logic and Mathematics would be one and the same science under different names. This is the point where the two sciences meet, and which has led some to consider them as one and the same science, or to borrow from Mathematics the method for philosophical inquiries, and consider it as the absolute method of knowledge. In fact, if A, B, C, D, &c., are mere quantities, they are numbers, or numerical symbols, and their relation is of a quantitative kind. Thus B, *genus*, will contain A, *species*, as 2 contains 1; and C, being a *genus* with reference to B, will contain B which is become a *species*, as 3 contains 2, &c. And if we apply the same criterion to syllogism, we shall arrive at the same result. Suppose A, B, C to be the three terms of a syllogism; suppose A to be the major, C the minor extreme, and B the middle term. According to the fundamental principle of the syllogistic theory, B is a middle term because it is so constituted as to contain C, and to be contained in A. Now, this is nothing else than a numerical proportion; that is to say, C is in B as B is in A, or $2 : 4 :: 4 : 8$. What prevents the student from perceiving the identity of the two formulas is either that the principle is represented in logical treatises by letters, to which no precise definition is attached, or that when the principle is enunciated by words, as in the following formulas, "*that what belongs to the whole must belong also to the part of this same whole*," or "*what belongs to the genus must belong also to the species of this same genus*"; here, too, what is meant by *whole* and *part*, by *genus* and *species*, is left in the dark. Had these terms been carefully analyzed and their possible meaning inquired into, it would have been perceived that they can only represent quantities and numbers. But what conceals the inanity of the rule is, above all, the example attached to it. For as the example is borrowed from concrete and real objects, one is led to think that the rule is embodied in the example. However, such is not the case. For if you strip the terms of all quality, i.e. of what does not belong to the province of Logic, the only thing, the only entity and reality left, will be this quantity. Thus

when the example,

All men are mortal.
Europeans are men :
Therefore, &c.

is quoted, one thinks that he has to do with something rational and some reality. But it ought to be borne in mind that formal Logic does not in any way concern itself with the reality of things, so that whether *man*, *mortal*, *European*, &c., exist either separately or conjointly, whether they possess such and such a quality or not, these are matters excluded from its province; and the only point left to its investigation is that *if these terms or things exist, if they possess such and such a quality and relation, they may be combined according to certain laws or rules of quantity.*

In order to place the matter beyond doubt, let us analyze the above example.

In the theory of Proposition it is taught, that in the *universal affirmative proposition the attribute is taken particularly*, or distributed; i.e. such a part of the attribute is taken as belongs to the subject. In fact, the attribute being a *Genus*, and the *Genus* containing several *species* or *parts*, the only part of the *genus* that can be taken is that which belongs to the corresponding species. Thus in the proposition, "All men are mortal," *mortal* being taken *particularly*, we have only a part of *mortal*, the part belonging to *all men*, or to *man*; i.e. we have two species, or two equal quantities, $4 = 4$. Now, what takes place in the *propositio major* takes place also in the *propositio minor*. Here the middle term, which was the *subject*, or species, in the major, becomes *attribute* or *genus* in the minor premise, and consequently is taken particularly as the attribute of the major premise. But here the part of the attribute being determined by a smaller subject, "European," we have another identical proposition differing from the first only in this, namely, that it contains a smaller quantity, say $2 = 2$. Thus we have two propositions identical:

$$\begin{array}{l} 4 = 4 \\ 2 = 2. \end{array}$$

The middle term being taken *particularly* in the minor premise, cannot be what it was in the major premise where

it was taken *universally*; so that if we consider the quantitative value of the terms, either in each proposition separately, or in the two propositions jointly, we have two identical propositions, i.e. a syllogism in which the middle term $4 + 2$ is equal to the two extremes $4 + 2$, which means that there is no middle term nor any syllogism at all. In fact, as the attribute of the affirmative proposition must be taken particularly, the middle term can neither contain nor be contained, and consequently the fundamental principle of the syllogistic structure falls to the ground. When therefore, to justify the rule, an example is brought forward objectively and materially correct, its correctness is independent of the logical rule, and rests upon other grounds. That all men are really mortal, and that Europeans being men are also mortal—these and similar propositions are derived either from experimental or from metaphysical knowledge, and their truth and necessity are founded upon the *quality* and *nature* of terms, and nowise upon their *quantity*.

It will perhaps be said that to consider in Proposition and Syllogism the *quantity* only, and not to comprehend the *quality* therein, is to take a narrow and erroneous view of formal Logic; and that, in order to form a correct notion of the subject, one ought to embrace and combine both quantity and quality. Thus in the propositions, "Man is mortal," "The rose is red," &c., "mortal" and "red" ought to be considered with reference both to quantity and to quality; for with reference to *quantity* they constitute a *genus* which embraces the *species*, and with reference to *quality* they constitute a character or attribute *inherent* in the subject. Consequently, in syllogism the relations of the three terms must be considered not only with reference to their quantity, but to their quality also; so that, if we consider the middle term as a quality common to the extremes, we shall see that these latter must, as a consequence, be connected together; and thus the syllogistic theory will be justified.

That in terms and proposition the Quality should be taken into account, I am far from denying; indeed it is Quality which, in logical as well as in all other scientific researches, ought to be more carefully investigated and defined than quantity, as it is quality that comes the nearest to the very

essence of things; and it may be affirmed that had Logicians given a closer attention to the quality of logical laws and operations, they would have formed a different notion of Logic, and rested it on a broader and higher basis. But of this more fully hereafter. Here I will confine myself to pointing out the failures and inconsistencies brought to light by the consideration of quality in logical theories as they now stand. In fact, by contrasting quantity and quality as they are combined in proposition, we shall easily perceive that they are at variance and cannot be reconciled with each other. For, according to quantity, it is the subject that would be contained in the attribute; and according to quality, it is the attribute that would be contained in the subject. According to quantity, the attribute or genus would contain several subjects or species; according to quality, it is the subject or the species that would contain several attributes or genera: and in order to see the bearing of this inconsistency, and how far it vitiates the whole logical structure, let us throw a retrospective glance over its various parts, and examine them in their mutual relation.

It is plain that the syllogistic theory rests entirely on the theory of Terms. For, as I have shown, the combination of Terms in Proposition and the combination of Propositions in Syllogism is made according to the elementary constitution of Terms. Now, we are taught in the theory of Terms that these are constituted in such a manner as to form a sequence, a progression in which the lower and narrower term — the species — is contained in the higher and wider — the genus; which means, if it means anything, that the genus is superior to the species, and consequently that the genus, rather than the species, ought to be the principle of demonstration. But, contrary to our expectation, we find in Syllogism the species furnishing the middle term and playing the principal part. Why it should be so, is not stated. It may be said that the Species, being something intermediate between the individual, or the inferior species, and the genus, is the only term that can supply the middle term. But then the theory of Terms falls to the ground, and with the theory of Terms the theory of Syllogism, as a syllogism cannot be made up unless the Species is contained in the genus. This is not all. For

if, in a syllogism, taken singly, it is the species that stands higher than the genus, then we find that in a series of syllogisms it is the genus that retains the higher rank. Thus, when the species requires demonstration, it is the genus that is brought forward. For instance, supposing that the major premise of the syllogism,

All Europeans are mortal.

The French are Europeans, &c.,

should be demonstrated, the middle term of the new syllogism would be the genus, *all men*; and if we want to prove this second argument, we must bring forward some still higher genus—*all corporeal beings*, or *all created beings*, for instance. Thus in the theory of Terms the genus is superior to the species, in the theory of Syllogism it is sometimes subordinate and sometimes superior to the species; it is subordinate in a single syllogism and it resumes its former rank in a series of syllogisms: all this not according to any fixed rule or to rational Logic, but to the arbitrary proceedings and requirements of formal Logic.

To give another instance of the manner in which this science is dealt with in some of the most popular books, I will conclude these remarks by quoting a passage from Dr. Whately's *Logic*, which embodies, as it were, the common method of similar treatises. After having defined Logic as the science of *Reasoning*, and not of *Reason*—which means that Logic has nothing in common with Metaphysics—the author, when arrived at the theory of Terms, states that, amongst the terms, there are some which express the *Essence* of things. (Now, what is Metaphysics but the science which inquires into the essence of things?) Then he goes on to say that the term which expresses the *whole essence* is the Species, and that the *genus* and the *Differentia* express, the former the *material*, the latter the *formal* and *distinguishing* part of this essence; adding further that, in reality, it is not the GENUS that contains the Species but the *Species* that contains the genus, and that when the Genus is called a whole, and is said to contain the Species, this is only a *metaphorical expression* signifying that it comprehends the species in its more *extensive* signification; so that *man* is a more *full* and *complete* expression than *animal*, though less *extensive*

than *animal*: and the theory is wound up by saying that if MAN is more *full* and *complete* than the genus *animal*, the *individual* is, in its turn, more *full* and *complete* than the species *man*.* This passage shows how fallacious, inconsistent, and artificial, formal Logic is. For it is plain that if the *Individual* is more full and complete than the Species and the Genus, the Individual ought to be the principle of demonstration. But, then, what becomes of Syllogism, and of the *universal proposition* which is the *perfect form* of demonstration, nay, the only demonstration, and that upon which, as it were, turns the whole Logic? Besides, what mean the words that the Genus is the *material* part of the essence of things? In the Aristotelian theories these words have a meaning, whatever be the value of these theories. For, according to Aristotle, all things consist of *Matter* and *Form*, and the Genus, being more indeterminate than the Species, expresses the *Matter*. But these considerations belong to Ontology and Metaphysics, and those who distinguish between Reason and Reasoning, and pretend that Logic has no connection whatever with Metaphysics, are debarred from introducing these expressions and theories into the province of Logic. Again, if the Genus comprehends only *metaphorically* the Species, then the subject of the major and the subject of the minor premises will be also contained only metaphorically in their attributes, and thus Syllogism will become a combination of metaphors. But what is still more startling is to find first stated that the *Species* expresses the *whole essence*, and a few lines below that the *Individual* is more *full* and *complete* than the Species. Now, can anything be possibly conceived *more full* and *more complete* than the *whole essence*?

§ 2. *The Principle of Contradiction.*

As everything must be identical to itself, and cannot be conceived to be other than, or contrary to, itself, it follows that every proposition or thought in accordance with this criterion is true, and every proposition or thought at variance with it is false. And, as a consequence of this principle, it is thought that there cannot be any intermediate term between

* See Whately's Logic, pp. 129-31.

two opposite attributes, and that one of them must be necessarily affirmed and the other necessarily denied of the same subject. Such is the famous principle of *contradiction*, and *exclusi tertii*, which Logic holds out as the supreme and absolute test of truth. Now, I do not hesitate to affirm that it is this principle which begets the most obstinate and inveterate errors, and sets up a barrier against a comprehensive and really rational knowledge. And here, too, we find Logic falling into the same inconsistencies we have met with in the theories we have just examined; for after having laid down the principle, Logicians lose sight of it, and set forth theories quite at variance with it. How can, for instance, the *theory of Division* be reconciled with the principle of contradiction, when we find, as a fundamental rule of Division, that the genus must be divided into *irreducible species*, i.e. species the attributes of which are repugnant to each other. For it is plain that the opposite species coëxist in the genus, and, therefore, that one and the same subject may involve opposite qualities. *White* and *black* coëxist in the genus *Color*, *rational* and *irrational* in the genus *Animal*; so that *Color*, *Animal*, &c., are the *tertium quid*, the medium comprehending the contradiction. In fact, I do not know of any principle more at variance either with experimental or with speculative knowledge than the principle of contradiction; and its being received as a criterion of truth can be explained only by its not being properly understood. Let us, then, define its meaning—the meaning which is, and the meaning which must be, attached to it.

A thing, it is said, cannot be other than itself; i.e. cannot possess any quality contrary to another quality; to which it is added, that it cannot possess it at the same time and in the same respect. Thus, if a thing is white it cannot be black, and if a body is light it cannot be heavy, at the same time and in the same relation. This is the construction generally put on the principle of contradiction, and in this sense I admit it is correct; but it must be added that it has no scientific bearing—nay, it is puerile. For no one in his right mind would contend that a thing is not white while it is white; that the light is not the light, or the shade is not the shade; but the question

is whether the contradiction is a necessary law of things, a necessary principle governing the whole as well as the parts, and without which neither the whole nor the parts could possibly exist. For it little matters to know that the living is living whilst it is living, or that such and such individual is living; the important and decisive point being to determine whether, besides life, there is death, and if death is equally necessary, equally beneficial, equally conducing to the beauty, strength and harmony of things. Again, it would be puerile to say that man is not laughing whilst he is laughing, or that he is not sleeping whilst he is sleeping; but here, too, the question is whether mere opposition coëxists and must coëxist in man.

This is the truly scientific and rational meaning of the principle of contradiction, and when viewed in this light the fallacy of the construction put upon it by formal Logic will become manifest. For it will be seen that identity and non-contradiction, far from being the test of truth, are the reverse of it; that difference, opposition, and contradiction, constitute the universal law of things, and that there is no being, nothing on earth or in heaven—to use the Hegelian expression—that escapes this law. In Nature all is opposition and strife, and no being can be observed or conceived—from the imperceptible and obscure insect that crawls upon the earth up to the vast masses that revolve in space—which could exist without the presence and *stimulus* of conflicting elements, tendencies, and forces. In Mathematics we have opposition in numbers, in lines, in planes, in solids—the opposition of unity and duality, of even and odd, of entire and fractional numbers—of straight and broken, of horizontal and perpendicular lines—of centre and circumference, &c. In Morals we meet with the opposition of liberty and law, of antagonistic tendencies and motives. In Metaphysics, and other provinces of thought, we find the opposition of cause and effect, of substance and accident, of infinite and finite, &c. Finally, man is, as it were, made up of elements the most conflicting—body and soul, joy and grief, love and hatred, smiles and tears, health and sickness, &c.; of all mortal beings, he is the one in whom the contradictions and the struggles are the most intense; and he who will cast a deep and impartial look

into the nature of the Universe will see that, far from the absence of contradiction constituting the fundamental law of things, the more comprehensive, multifarious, and intense, the contradiction in a being, the higher its nature, the fuller its life, beauty, and perfection.

§ 3. *Applied Logic.*

If the principles and rules laid down by formal Logic are, abstractly considered, arbitrary and fallacious, it is evident that they must be equally so when applied to other provinces of knowledge, and that in general they must beget confusion of ideas, false habits of thought—or pervert and curtail the natural and real notions of things. And to begin with the principle of contradiction, if, as I have demonstrated, the Universe is, so to speak, an aggregate of contradictions, Logic, which teaches that the principle of contradiction is the test of truth, must set the mind in opposition to the very nature of things. In fact, if this principle should hold good, we could say, “Man is a being possessing the faculty of *laughing*”; but it would be illogical to say, “Man is a being possessing the faculty of *weeping*.” And if in common things, and matters of fact, the contradiction is admitted in spite of and against the principle of contradiction, it must be borne in mind that it is not so in speculative questions, and in matters of a far higher importance, but remote from common use, and above the reach of general appreciation. For here, misled and blinded by this principle, we refuse to acknowledge the very contradiction which not only we have acknowledged in other instances, but with regard to which we should consider as not being in their right mind those who would not acknowledge it. And it does not require a great strain of thought to trace to this principle the origin of most of our erroneous opinions and theories. Thus, in political and social science all absolute theories are founded on the exclusion of contradiction. For if men be *equal*, and there is no *natural inequality* between them, it follows that the present organization of society, in which inequality is recognized and sanctioned, is against nature; and, consequently, those who claim equality of rights, a common level of power, of classes, and education, are the legitimate organs

of truth and nature. The opinion that absolute forms of government—either monarchical or democratic—are more perfect and rational than mixed, has no other foundation, all absolute forms excluding contradiction. Similar instances may be discovered in other branches of knowledge, in ethical, in physical and metaphysical sciences. Thus those who contend that man is a mere sensitive being, and that sensibility constitutes his whole nature, if consistent, will teach, in Ethics, that *Sensation* and *Pleasure* are the only principle and criterion of morals; as, on the contrary, those who contend that what they call Reason constitutes man, will hold out *Duty* and *Good* as the only legitimate motives of action. Again, in Metaphysics, those who hold that man is *absolutely free*, and those who hold the opposite doctrine, namely, that *necessity* is the universal law of things, both rest their doctrine on the principle of contradiction. In short, were we to admit this principle, we should, if consistent, either mutilate the nature of things,—suppress, as it were, the half of the universe, and substitute arbitrary, narrow, and distorted notions for comprehensive and concrete reality, or evade the difficulty by inconsistencies or by mere verbal contrivances: for instance, that the straight and the broken lines may be considered as identical, their difference being so small that it may not be taken into account; or that the unity can be neither multiplied nor divided, and then making up the sum or the fractional number of unities, or parts of unities, added or divided; or that shade and cold are not realities, but mere privations of light and heat, as though privation could exist without the real principle that produces it; or that the Absolute is free from all contradictions, holding, at the same time, that God is merciful and stern in his justice—that he is the God of peace, and the God of war—that He is the principle of life, and the principle of death—that He is absolutely free, and the absolute and immutable law;—thus admitting and denying at the same time the very same thing we have denied or admitted in other instances and in another form, and throwing thereby all thought and knowledge into the most inextricable confusion. So much for the present on the principle of contradiction.

Let us now examine the value of logical theories in

their application either to experimental or to speculative science.

With regard to the first, it will be easily seen that it is only by a surreptitious process, and by giving to its principles a higher bearing than they intrinsically possess—in fact, by overstepping its own boundaries—that Logic pretends to bring about experimental knowledge. For we have, on the one hand, the universal proposition laid down as the necessary condition of all demonstrative and strictly scientific knowledge, and on the other we have facts, individuals, single and isolated phenomena. If, then, the universal proposition (whether it be the conclusion as in the *inductive*, or the major premise as in the *deductive* argument) is considered as a mere *form* of thought, as a form having no objective or any, consubstantial relation to the thing to be demonstrated, logical argument, when applied to experience, is nothing but a delusion. If between man as *individual* and man as a *species* there is only a subjective and formal connection, when I pretend to prove that *such a man* is really mortal because *all men* are mortal, or that *all men* are mortal because of *such and such a man* being mortal, I am only connecting together words or forms which do not affect in any way the nature of the thing I demonstrate, and consequently in reality and objectively I prove nothing. The argument, therefore, cannot be really conclusive, unless it be admitted that between the *individual* and the *universal*, the *fact* and the *principle*, there is a community of nature, an objective and consubstantial connection—a connection similar to that of *cause* and *effect*, of *substance* and *accidency*. But such a connection is beyond and above the reach of formal Logic—nay, it is the very connection that formal Logic expressly disclaims, as we have already noticed, and shall see more fully hereafter.

Passing now from inductive to deductive argument, and from experimental to metaphysical knowledge, we shall find here also Logic falling short of what it promises to accomplish, namely, to establish truth and principles by a correct and rational demonstration.

The supreme object of Metaphysics is, strictly speaking, the knowledge of the Absolute; and the Absolute, for the very reason that it is the Absolute, is the ultimate and most

evident principle of demonstration. This is the meaning of the expressions, "*God is the light of intellect; He is the Ideal of the Universe, the Thought, and the Being, and that nothing can exist or be conceived without Him.*" Now, all these and similar definitions of the Absolute necessarily imply the idea that the Absolute is also the absolute principle of demonstration, or, to use the more popular expression, that God is the Foundation of all demonstration. But it is not so with formal Logic; for were we to follow the rules laid down by it, the Absolute would be of no avail in syllogism and demonstration. In fact, the part the Absolute could fulfil in a syllogism would be either the part of minor or the part of major term, or that of middle term, or that of two of them. This is the circle of supposition we can form with regard to the Absolute. Now, it is evident that the Absolute cannot be the *minor* term, as the minor term is always demonstrated, and the Absolute is supposed to demonstrate and not to be demonstrated. Nor could it be the *major* term, as the major term is not the *middle* term; and it is the middle term that plays the highest part in syllogism. Nor is the *middle* term any better; for the middle term being the species, is contained in the genus and is inferior to it: so that neither the major term for not being the species or the middle term, nor the middle term for not being the genus or the major term, can constitute the absolute term of demonstration. It only remains, then, that the Absolute should be the union of both terms—of the species and the genus, or of the middle and major terms—so that when we say, for instance, *God or the Absolute is the Perfect Being, or possesses all perfections*, "God" and "all perfections" should be so intimately and so inseparably connected that one could neither exist nor be conceived without the other. But this supposition must likewise be rejected. In fact, are the two terms of the proposition absolutely identical? then there is in reality only one term, and their distinction is only a verbal one. Are they really and materially distinct? then, if united, their union must be effected by a third term, which, for the very reason that it unites them, would be superior to them, and in this case neither of them, but this third term would be the absolute.

Besides, in all propositions concerning the Absolute, the distinction or division into genus and species must be done away with as not being applicable to this province of knowledge. For instance, in the proposition, "The eternal and imperishable things are the principle of the temporary and perishable," which of the two terms would be the species, and which the genus? Shall we say that *temporary things* constitute the genus of the *eternal*? But this would be simply absurd. Shall we say, then, that it is the *eternal things* that constitute the genus of the *temporary*? But this would be in opposition to the fundamental rule of Logic, that the subject of a proposition should be the species, and the attribute the genus.

Finally, whether absolute propositions like these, "The Absolute Being is the source of all perfection," or "The Absolute Cause is the principle of all things," or "The Beautiful and the Good are the principle of all beauty and all good"—whether, I say, all these and the like propositions consist of genus and species or not, whether their terms be identical or different, they cannot supply the principle—the *propositio major*—of any demonstration, as it may be easily ascertained by trying to combine them in syllogism.*

The point the above remarks establish is that formal Logic cannot be reconciled with the principles which constitute the foundation—the *major principle* of all demonstration, and that no legitimate conclusion can be drawn from them.

If, now, we take up the counterpart of the question, or, so to speak, the question by the other end—by the conclusion—and show that no metaphysical knowledge or principle can

* It may be said that the following argument—

The absolute cause is the principle of all things.

God is the absolute cause:

Therefore God is the principle of all things—

is *logically* and *formally* correct. But in reality it is no argument at all; nay, it is at variance with the rules of Logic itself. For—even granted that the terms "God" and "absolute cause" be distinct, inasmuch as *Causality* may be considered as an *attribute of God*—*absolute cause*, which is an attribute of God, could not be the *middle term* or the principle of demonstration, and God the *minor term* and that part of the proposition which is demonstrated. Rather the reverse would be the case; I mean that it is the *propositio minor* that ought to take the place of the *propositio major*. But, then, from a *propositio major* like this, "God is the absolute cause," no conclusion can be drawn.

be obtained through syllogism (in the conclusion), we shall complete the demonstration.

It has already been observed that all attempts to prove by syllogism, and on *à priori* argument—which, strictly speaking, is the only metaphysical and speculative demonstration*—the existence of God, have failed. The reason of this failure is very simple. Neither God, nor anything—attribute or perfection—appertaining to God, can be syllogistically demonstrated. For God, being the Absolute, demonstrates all, and is demonstrated by nothing; consequently, the Existence or the Being of God, who is *the Being*, cannot be demonstrated by any other Being; in other words, there cannot possibly be any middle term, or principle, by which God, or God's nature, could be demonstrated; for a principle demonstrating God would be something more perfect and higher than God, and thus God would not be the Absolute principle of demonstration. Thus all proofs of this kind are either mere verbal contrivances or circles, as may be ascertained by analyzing the famous argument drawn from the idea of the *Infinite of Perfect Being* when presented in the syllogistic form. And, to place the matter beyond doubt, let us examine this argument, upon which, as Kant has already observed, hang all *speculative* proofs and certainty of the existence of God.

The point to be demonstrated is the *Existence of God*, and the gist of the proof, nay, the whole proof, rests on the Idea of the *Infinite* or the *Perfect Being*. For it is out of this Idea and by analytical process that the three terms of the argument must be evolved. Now it may be seen at a glance, as it were, that a syllogism so constituted can be but a circle.

* The really Metaphysical and Speculative proofs of the Existence of God are those deduced from a primordial and *pure* idea—the idea of the Infinite, of the Absolute, of the Perfect Being, &c.—considered in itself and apart from all experimental data. Inductive arguments, as for instance those known under the name of *physical proofs*, are not strictly demonstrative. Indeed they presuppose the Metaphysical proof, and the absolute notion upon which this proof is founded. In fact, from the apprehension of finite causes or effects, or of the beauty, proportion and harmony of the Universe, it would be impossible for us to raise our mind to the contemplation of an *Absolute Cause*, of an *Absolute Finality*, &c., were it not that these notions preëxist in the mind, and are—consciously or unconsciously—suggested by it.

In fact, in affirming the *Infinite*, either we affirm a *Reality*, a *Real Being*, or a mere subjective representation, a certain form of thought possessing no objective entity, no being corresponding to it. In the latter case there is no syllogism at all, for there is no more connection between the *real existence* of God and the *Idea* of the Infinite than between bear the animal and Bear the constellation. If, on the other hand, in affirming the Infinite we affirm a *Reality*, we affirm thereby the existence of the Infinite, or of the Infinite Being, and in this case the conclusion is contained, not virtually or implicitly, but actually and explicitly, in the major premise. In fact, when we state in the major premise that the "Infinite is the Being that possesses all perfections," we admit—and cannot but admit—at the same time, that the Infinite exists, otherwise there would be no meaning in the proposition.*

This completes the demonstration; for it shows that Logic is, so to speak, refused admittance into the domain of Metaphysics by both ends of the argument, namely, by the major premise and by the conclusion. By the major premise, from its being unable to avail itself of the Absolute as a principle of demonstration, as I have shown in the first instance; by

* The argument is this:

The Infinite or the Perfect Being must possess all perfections.

The Existence is a perfection:

Therefore the Perfect Being exists, or the Existence belongs to the Perfect Being.

It will be observed that this syllogism is fallacious and *inconclusive* even according to the rules laid down by Logic, or according to the rational combination of terms; for it is a Syllogism of the 2d Figure with two *affirmative* premises, whilst we are taught that one of them must be negative. Now, even granted that in this particular case the two premises might, by exception, be affirmative, the conclusion could not be legitimately drawn from them; for the conclusion would be either, "The Perfect Being exists," or "The Existence belongs to the Perfect Being." In the first case, the subject of the conclusion would be the *Major extreme*, whilst it ought to be the *Minor extreme*; in the second case, it is only by inverting the natural position of terms, and putting language and thought to torture, that the conclusion would be obtained. For if the Existence be a perfection or an attribute of God, it must fill the place of the attribute and not that of the subject.

The remarks contained in this note and text equally apply to all *speculative proofs* of the existence and attributes of God—nay, to all argument which attempts to demonstrate the absolute, the ideas, and essence of things.

the conclusion, as it is unable to demonstrate the Absolute, as I have shown in the second instance.

§ 4. *Reason and Reasoning.*

This impotency of old Logic to reach Metaphysical knowledge has brought out the well-known and fallacious distinction between Reason and Reasoning. Unable to remodel Logic, in order to make it available in the highest field of scientific research, and feeling, at the same time, that there must be some connection between this universal organon of knowledge and metaphysical science, some philosophers, to solve the difficulty, have resorted to the above distinction, setting forth that there is the same connection and the same difference between Metaphysics and Logic as between the principle and the consequence, between affirming a principle and deducing consequences therefrom. Metaphysics, according to this opinion, inquiring into the absolute principle and ultimate causes of things, whilst Logic deduces consequences by applying them to secondary causes or effects and to particular objects.

The preceding investigation would suffice to show how clumsy and inadmissible this opinion is, as they establish irreversibly, I think, that not only Metaphysics and Logic—as this latter stands at present—are two distinct provinces of knowledge, but that they are irreconcilable; and, consequently, that this deduction of consequences by Logic out of Metaphysical principles is a bare assumption—nay, a mere delusion. However, in order to place this latter point in a more prominent light, let us grant, for a moment, that it may be so, and that we have here two sciences, one of which supplies the principles, and the other the consequences—the former being the product of a faculty called *Reason*, and the latter of a faculty called *Reasoning*.

Now if this theory possess any meaning, it means this, namely, that in syllogism *Reason* suggests the *major* premise, and *Reasoning* the *minor* premise as well as the relation of the latter to the former, from the perception of which relation it brings forth the conclusion. But then the *Reasoning faculty* would stand higher than *Reason*, and perform opera-

tions more important and more complete than the latter, which is contradictory to and against the supposition. For we suppose—and must admit—that the faculty which reveals to us the ultimate principle of things is the *τὸ ἡγεμονικόν*—the governing power to which all other faculties stand subordinate, as the soldier is subordinate to the general and the menial laborer to the architect. Now the above distinction inverts, so to speak, the rules, and sets forth Reason as a subordinate faculty. In fact, when we say that Reason propounds the principles and Reasoning deduces the consequences therefrom, we say, in reality, that the knowledge of Reason, or obtained through it, is confined to principles and forbidden to overstep these boundaries, whilst Reasoning embraces both principles and consequences. For, to deduce consequences from principles, the Reasoning faculty must apprehend both, and the principles more distinctly than the consequences and previous to them, as the latter are drawn from the former. Let us consider a syllogism.

All virtue comes from God.

Justice is a virtue:

Therefore, &c.

It is quite plain that all the terms and propositions as well as their relation must be perceived by one and the same faculty. Were they perceived by different faculties, one of which stops, as it were, at the major premise, whilst the other takes up the operation at the minor premise, without perceiving the principle as distinctly as the first faculty—nay, more distinctly, from the very fact that it draws inferences from it—the argument could never be made up. And the correctness of these remarks will become more manifest if we take the three terms of which syllogism consists and put them in this form,

A B C,

A being the minor, C the major, and B the middle term. For it will be seen that B, whose function it is to connect A and C, must be apprehended by one and the same faculty. But the B of which C is affirmed in the major proposition, is the same B which is affirmed of A in the minor. Consequently, it must be the same faculty that brings forth and affirms B in the two propositions. Again, the C of the major proposi-

tion is the C of the conclusion, and here also we have the same faculty perceiving C in both propositions. Lastly, if it be one and the same faculty which affirms B and C in the three propositions, it must necessarily be one and the same faculty that affirms B and C of A in the minor premise and in the conclusion. In other words, syllogism is a mental operation by which the connection of three terms is demonstrated. Now, even supposing that the performing of such operation should require the working of different faculties—that there should be, for instance, a faculty which supplies the terms and another faculty which supplies the propositions—there must be, at any rate, a superior and more comprehensive faculty by which all these elements—faculties, terms, and propositions—are connected together in the unity of syllogism. Hence it follows that the distinction between Reason and Reasoning which is to be the line of demarcation between Metaphysics and Logic vanishes before a close investigation of the matter, and consequently that either Metaphysics is a part of Logic or Logic a part of Metaphysics, or, if there be any distinction between them, it is a distinction of a different kind and founded upon other principles.

CHAPTER III.

§ 1. *Preliminary Remarks to Legitimate Logic.*

We may now dismiss old Logic as artificial, arbitrary, and inadequate for the attainment of truth, and turn our attention to legitimate and rational Logic and to the principles upon which it must be firmly established.

First of all, it ought to be borne in mind that if there be a logical Science, it must be an absolute Science, or a part or division of the absolute Science. And by absolute Science, I mean a Science which inquires into, and is adequate to, the absolute and eternal nature both of thought and things. For neither thought which is not the right thought of its object, nor the object which is not rationally thought, is science. Nor is it science if it is thought which is not an absolute, but a limited, transient, and accidental thought. Thus in dividing, defining, classifying, in deducing Ideas, or in affirming the Infinite and describing its attributes, either thought grasps and defines the inward and immutable nature of things, in which case there will be science, or it performs mental operations which are not necessarily and inwardly connected with the nature of things, in which case there will only be the shadow of science, nay, mere delusion and phantoms of the imagination.

This shows how unfounded is the division, generally admitted, of Truth into *logical* and *metaphysical* truth, a sister distinction to that we have just exploded between *Reason* and *Reasoning*. For it will be easily perceived that if Logical truth, whatever it may be, is not an absolute truth, it is no truth at all. If, on the contrary, it is an absolute truth, it possesses in its own sphere and attribution a worth and importance equal to that of Metaphysical truth—indeed it is itself a metaphysical truth. In fact, if there be an absolute Science, this Science must be Logic. All sciences presuppose Logic, whilst Logic presupposes none. All sciences avail themselves of logical processes and notions; nor could they attain their own peculiar object without bringing them into

action, as it were. Even taking Logic as it now stands, it is easy to see that all sciences—Mathematics, Physics, Ontology, &c.—borrow from it a part of their own subject-matter. And by borrowing I mean this, namely, that all Sciences make, and cannot but make, Logical principles and substance (if I am allowed the expression) a part of their own substance, like the plant that borrows from surrounding elements strength and life. And as earth, air, and light, constitute an integral part of the plant's life and nature, so Logic must be considered as a necessary and essential element of all Sciences, and consequently of all Thought and Being. In fact, it would be irrational and inconsistent to admit that Logic is the universal organon of truth, that there is no being that can be apprehended or understood unless it goes through some logical process, and to refuse at the same time to Logic all objective and consubstantial connection with the very being known through it. Indeed, if we look closely into the subject, we will perceive that, by taking this view of Logic, we admit that there are two Logical sciences, a Logic eternal and absolute, according to which things are made, arranged, and thought; and a Logic finite, accidental, and arbitrarily contrived for our special use and purpose. But then we must give up Logic—and, with Logic, Science—as useless and deceptive, and as holding out expectations it is absolutely unable to fulfil. For we use it in the expectation of attaining through it the real knowledge of things, and actually find that our knowledge has no other foundation, nor any other object, but our own transitory notion, and the negative and limited conceptions of our mind.

In order to arrive at a correct view of Logic we must, therefore, view it as a Science in the strict sense of the word, viz. as a Science of *Knowing* and *Being*, whose principles constitute at once the principles of thought and the principles of things; so that if we were, for instance, to realize it as the Science of *Form*, we should not consider the Form, as old Logic does, namely, as a merely *subjective Form*, but as a Form embracing the twofold sides of existence—the subjective and the objective, thought and the thing thought—in the unity of its nature.

§ 2. On Science in general.

As Logic, whatever be its importance, constitutes only a part of the Absolute, or of the Absolute Science, we cannot form a clear notion of Logic unless we give an insight into Science in general, its conditions, its bearing, and the part it plays in the constitution and the existence of the Universe.

(a) *Is there an Absolute Science?*

If there be an absolute Science, this must be the Science of the Absolute, and, *vice versa*, if there be an Absolute, there must be an absolute Science. For an Absolute without an absolute Science is no absolute, and an absolute Science without an absolute object is not an absolute Science. The absolute Science and the Absolute, the absolute thought and the absolute object of thought, are therefore reciprocally and inseparably connected, or, to speak more properly, are the two sides of one and the same being. The question now is whether the Absolute is within the reach of the human mind; and as it is a question of vital importance, and bearing upon Logic as well as upon Science in general, I will dwell at some length upon it.

The opinion respecting the capability of the human mind to attain absolute knowledge may, I think, be divided into three heads.

First, there are those who entirely refuse to the human mind the power of reaching the Absolute. The Absolute, if it exist, they argue, is a *Deus absconditus*; it is a Being into whose ineffable and inscrutable nature no human eye can penetrate. In fact, is not man an imperfect and finite being? How, then, could he comprehend the Perfect and the Infinite?

Secondly, there are others who steer an intermediate course. These do not say that we are refused all knowledge of the Absolute, but that our knowledge does not extend beyond its existence. We know that the Absolute *is*, but we are not allowed to know *what* it is, and to have an insight into its nature, its attributes and perfections.

Finally, others go one step farther, and admit that we are capable of apprehending both its existence and some of its attributes, as, for instance, that it is Infinite, All-powerful, All-wise, &c., without being able to reach the very length,

the essence of its nature, nor to determine clearly and in a *positive* manner what these attributes are; and consequently, according to this tenet, we would know that the Absolute is All-wise, Omnipotent, &c., without comprehending *what* omnipotence, all-wisdom, &c., are.

Although these doctrines seem, at first sight, to stand on different bases, and to represent different opinions, they start in reality from the same point of view—the inadequacy of the human mind for the attainment of absolute knowledge; and lead to the same result—the negation of Science, or Skepticism. Indeed the two latter, though apparently more comprehensive and more condescending, as it were, towards the human mind, labor, when compared with the former, under the disadvantage of inconsistency; and the third, which seems to conciliate matters and to hit upon the right solution is the most inconsistent of the two. In fact there is no inconsistency in affirming that man's mind is utterly inadequate for absolute knowledge. There may be error, but there is no inconsistency; whilst in the other two opinions error is coupled with inconsistency, as they state both, and the latter more explicitly than the second, that man can reach the Absolute, and then they take up, so to speak, the opposite thesis, in the same proposition, and state that he is unable to reach it; and although the inconsistency does not appear in the expression, it is not the less involved in the real meaning.

The second doctrine teaches that we are allowed to know that God *is*, but we are forbidden to advance a step farther. If we were to trace the origin of this doctrine, we should find that it arises from a superficial view of the subject, and from an application equally superficial and erroneous of the analogical and inductive process to absolute knowledge. Here is a tree, or an animal, or myself. As I can affirm that a tree *is*, or that I *am*, without knowing the nature of the tree or my own, so likewise can I affirm that God *is*, although I may be unable to comprehend His attributes and nature.

Now this manner of arguing is erroneous and deceptive even within the sphere of experimental perception. For the perception of the existence of all objects which come within the pale of experience is inseparable from the perception of some of their qualities; as, for instance, that the tree occupies

a portion of space; that it has color, leaves, &c.; and its existence is made known to me through some of these qualities. Nor am I conscious of my existence save by apprehending myself either as a thinking, or as an active, or as a sensitive being. Now this connection between the existence and the attributes of a being is still more intimate and inseparable in God. For when we say that God *is*, we do not mean that He *is* like anything finite, or falling under the senses, but that He *is* in such a manner as is conformable with the perfection of His nature. Consequently, the affirmation of the existence of God involves already the apprehension of the *manner* in which God exists, that is to say, of a part or aspect of the Divine nature. Besides, when we state that *God is*, either the word *God* is a mere word, an empty sound, and then the proposition means nothing; or it has a meaning, and then it means that the *Absolute*, or the *Perfect Being*, or the *Ens realissimum*, etc., *is*; i.e. it expresses some essential and necessary attribute of the nature of God. In fact, in God the *Esse essentiae* and the *Esse existentiae*, to use the expression of Schoolmen, are more intimately blended than in finite beings; so that in God *to be* and *to be such* is one and the same thing. Nor could He *be* if He might be otherwise than He is, and, *vice versa*, were He otherwise than He is, He could not be. Consequently, to apprehend that God *is*, is to apprehend, in a certain manner, *what* He is; and to pretend that we can apprehend that God is, and then to say that we are not allowed to know what He is, is to deny in the second part of the proposition what we have admitted in the first.

With respect to the third doctrine, it will be easily seen that it is still more inconsistent and arbitrary; for it states that we are allowed to apprehend a part only of the Absolute, and then it adds that even this part is known to us *negatively*; which means, in reality, that we do not know it at all.

With regard to the first part of the proposition, namely, that we know, or are capable of knowing, a portion, a certain number of the attributes of the Absolute, but not the whole of His nature,—it will be observed that those who hold this doctrine break asunder artificially and arbitrarily the unity of the Absolute, and, after having thus disfigured, nay, an-

nulled the absolute, say, this part of the absolute we can know, and this other part we are not allowed to know. But how can they say that there is a part, a sphere in the absolute which is beyond the reach of the mind, if the mind has no notion of it? If, on the contrary, the mind has some notion of it, how can they say that it is beyond the reach of the mind? Besides, is it not one and the same mind that apprehends in the one and the same absolute both the part which is known and that which is supposed to be unknown? If so, how could I affirm that the part supposed unknown in the absolute belongs really to the absolute, and constitutes the highest sphere of its nature and existence, if I have not actually, or am not allowed to have, any knowledge of it? The fact is that the absolute cannot be so dismembered; for, such is the unity of its nature, that of the Absolute, more than any of other being, it may be truly said, that, if we cannot know all, we can know nothing of it.

But even granted that it would be rational to admit that we know only a part of the Absolute,—if the knowledge we possess of it is merely a *negative* one, such a knowledge is, in reality, no knowledge at all. In fact, to possess a *negative* knowledge of a thing, is not to know what *this thing is*, but what *it is not*. For instance, to have a *negative* knowledge of the *triangle* is not to know what the *triangle* is, but that the *triangle* is not a *square*; or to have a *negative* knowledge of a *tree* is not to know what the *tree* is, but that the *tree* is not a *mountain*; or to have a *negative knowledge* of the *good* is not to know what the *good* is, but that the *good* is neither the *evil*, nor the *beautiful*, nor any other thing. This manner of arguing seems, at first sight, quite plausible; for although I do not know, one would say, what a man is doing at the present moment, yet this I perfectly know, that he is neither writing, nor reading, nor sleeping, &c. All the strength of the argument lies in the assumption that we are able to know what a thing *is not* without knowing in any way what it is. Now it is quite plain that we cannot state what a thing is not unless we know in some manner what it is—unless, in other words, we possess some *positive* knowledge of it. For I must know in a *positive* manner what a man is to affirm that he is neither writing nor sleeping, &c.; nay, I

must know that writing and sleeping are parts of his nature. And this connection of positive and negative knowledge is still more inseparable in matters eternal and absolute. To say that the Infinite is not the Finite requires that I should have some positive notion of what the Infinite is. And it is by comparing the positive notion of the Infinite with the Finite that I am enabled to draw the conclusion that the former is not the latter. Had I not some positive notion of the Infinite I could neither affirm that the Infinite *is*, nor that *it is* or is *not* in such and such a manner.

The fact is that we cannot consistently conceive two Sciences, an absolute science and a science which is not absolute—not any more than we can admit two Reasons, the human Reason and the Divine Reason, as substantially distinct. For by admitting two Reasons we would not only admit that one Reason knows what the other does not know—a difference which exists within the limits of the human Reason and between man and man—but that what is knowledge and truth to the one is not, or may not be, knowledge and truth to the other. For if the Reason which apprehends mathematical or any other truth, in man, is not the Reason which apprehends the same truth in God, or if the Reason by which man apprehends God is of a different genus and substance from that by which God apprehends himself, all human knowledge is a mere delusion. Indeed all relation between God and man is at an end if God's and man's Reason does not flow from one and the same principle. And this would strike at the very root not only of Science but of Revelation also; as where there is not a community of nature, some identical faculty between the master and the disciple, there can be no teaching possible, let this take place either through an inward inspiration from mind to mind, or by word of mouth. Therefore the only solution of the problem—the solution which alone will be found, upon an impartial and close examination, consistent with science, religion and truth—is that the divine and the human reason, springing from one and the same source, are, as to their essence, one and the same reason.*

* See also on this question my book, lately published, "The Problem of the Absolute."

(b) *Nature and Characteristics of Science.*

To the uncultivated and unscientific mind Science appears as an accident, and a kind of superfluous luxury which is not required by any inward want or necessity of human nature. This is the point of view of purely sensitive life belonging to the undeveloped and elementary stage of existence, either national or individual—to what we might call the state of childhood and nature. Here the satisfaction of physical wants appears as the law of life. For, to quote the argument in its popular and crude form, there is necessity in eating and drinking, and in removing all unpleasurable sensation; but there is no necessity in learning.

However, man soon feels that physical life is not the supreme object of his existence, that there are wants of a higher order and more cognate with his own nature than physical wants, and that the satisfaction of the former is a duty as imperative, nay, more imperative, than the satisfaction of the latter. For it is this that makes him what he is, a being who by his mind holds sway over the inanimate and brute creation, adapting it to his spiritual as well as to his material wants, elevating thereby the latter to a higher dignity, and imparting to them such beauty and perfection as they would never have possessed had not the mind stamped them with its own perfection. Here man acknowledges Science and reverences it. He acknowledges that Science is an object of paramount importance either as a moral and intellectual necessity, or as a source of the purest enjoyment, or as a means of conquering the blind and unruly forces of Nature. Now this acknowledgment is nothing else than the actual expression and manifestation of the *idea* of Science. In fact, the idea or notion of Science is, like the ideas of the Infinite, of the Beautiful, of Justice, of Number, &c., a primitive, objective, and necessary attribute of the mind; or, more exactly, it is a notion that springs from its very essence, and is more intimately inherent in it than any other notion, principle, or law. For it may be truly said that the mind is more absolutely and more irresistibly attracted towards Science than matter towards its centre; as a mind not possessing any desire for knowledge would be a sort of *contradictio in terminis*—it would be a mind which is not a mind, an understand-

ing which is not an understanding. But this desire for knowledge, this inward and inextinguishable longing after truth, is nothing but a movement of the Intellect towards its natural object and nourishment, stimulated, as the Intellect is, by this very Idea of Science; so much so, that were the Idea erased from the Intellect, the longing also would thereby be extinguished.

If it be so, if Science rests on a primary notion or law of the mind, to determine the nature and essence of Science we have only to describe the essential feature and characteristics of this same notion.

First of all, the notion of Science and the notion of absolute Science are inseparable, or, more accurately speaking, are one and the same notion. All relative and finite knowledge conceals under various forms, and more or less visibly, an infinite knowledge, from which it emanates and with which it is connected by necessary and inward bonds. Thus it may be truly said that the natural and predominant aspiration of the mind is not towards limited but absolute knowledge—an aspiration that rises with the rising of our intellectual activity. That world-embracing curiosity, that vague but profound and ardent desire for universal knowledge which is fermenting as it were in the innermost recess of our soul, is nothing else than the aspiration, still obscure and indefinite, after absolute science, of which subsequent inquiries are the greatest satisfaction and actual realization. This aspiration, or want, or whatever it be called, may be traced in every mind; and the only difference between them in this respect is the difference arising from the various degrees of their development, or from the influence which external and accidental causes—moral, social, and physical—exercise upon this development either to promote or to impede it, as well as from their application to the multifarious objects of knowledge and practical activity. And if we closely examine into the nature of beings, and the constitution of the Universe, such differences, far from surprising us, will appear as a necessary condition of this existence. Thus all men virtually possess the same faculties and instincts, all are endowed with the same natural aptitude for all social functions.

But the unity of the Universe as well as the unity of human nature is divided into particular and individual beings, and split as it were into fragments; the necessary consequence of which division is that in some beauty, in others morality, most predominates; that one is possessed of a peculiar aptitude for mechanical labor, and another for some liberal or intellectual avocation. So it is with science. There is but one Science, as there is but one Intellect; and particular sciences constitute as many degrees, or stages, of the absolute Science. They are so many radii that spring from a central focus, from which they derive life, light, and nourishment. The natural philosopher who studies matter and its laws well knows that his investigations and results possess but a limited and relative importance, and are subordinate to a superior knowledge, where their justification and ultimate reason are only to be found. He knows it, or he must know it. And if he be not aware of it—if, in consequence of a defective intellectual training he concentrates his attention and inquiries within the limited sphere of nature, seeking in it the ultimate solution of the problem of science, he is certainly mistaken in seeking the centre of knowledge where it is not to be found. Yet he thereby explicitly acknowledges that there is such a centre; he acknowledges, in other words, the existence and necessity of an absolute Science, and it is such a science he endeavors to realize. And so it would be with Mathematics and with any limited science that would set itself up as the ruling power of Intellect and as the Science of sciences. This high pretension would not be in keeping with the limited object of this investigation, but this would, at the same time, bear testimony to the existence of a higher object and a higher visual power than their own. Science and absolute Science are therefore, in the strict sense of the word, identical, and particular sciences are only sciences, inasmuch as they are parts of the absolute Science, coincide with, and are justified by it. Now, as there cannot be two Sciences, the second essential character of the really scientific knowledge is *unity*. The unity of Science is not the mathematical or *quantitative* unity, but the higher and *absolute* unity of *qualities* and *essences*, something like the unity of the human

body, or the unity of the Universe*; namely, a whole in which the various qualities and essences, the conflicting elements, forces, and principles, are so harmoniously adjusted as to converge towards one and the same centre, and melt, as it were, into a common result; in other words, Science is essentially a *System*.

There are those who object to systematic knowledge on the plea that a system, i.e. a doctrine, which would be, so to speak, the reflex of the Universe, embracing the universality of things, deducing and connecting them according to some rational process, describing their properties and nature, and determining the part they play either within their own limited sphere or in their relation to the whole, is well nigh, if not wholly, impossible. But the difficulty, however great it may be, we meet with in the realization of a scheme, is not a test against its rationality and usefulness; and because it is not an easy matter to realize a system, it does in no way follow that we must not make the attempt, if Science be, as it evidently is, a system. On the contrary, the consequence to be naturally drawn therefrom is, that the more systematic the investigation, the more accurate and complete the result. And it ought to be borne in mind, that the difficulty we find in realizing a perfect system may be said to beset all knowledge, the knowledge of the most rudimentary and minute object—of a pebble, of an insect—so that this argument belongs to the category of those which overshoot the mark, or, as logicians say, proving too much prove nothing. Indeed, if the matter be attentively inquired into, it will be seen that the difficulty in explaining the nature of particular beings chiefly arises from the absence of systematic knowledge,

* This is an important distinction; for, misled by mathematical notions, we are apt to represent to ourselves the unity of things as an empty and abstract mathematical unity. But the unity of *force*, the unity of the *soul*, the unity of *God*, are neither *points* nor *numbers*, but are indivisible wholes, containing *quality* and *quantity* as well as the various attributes that constitute their nature. When we say that the soul is—that it possesses sensibility, will, intellect, &c., we *count* its attributes, and in this respect there is *quantity* in it; but the connection or unity of these *faculties* and *qualities* is not a *numerical* but an *essential* unity—the unity of the essence of the soul. Besides, the unity of thought that *thinks*, and *is* all things, cannot be the mathematical unit. (See below “§ 3. On Thought.”)

which precludes the mind from perceiving their connection with collateral beings and with the whole. For the part thus singled out and dissevered from the whole is not the same being as when connected with the whole. The eye which is separated from the body is no longer an eye but a dead and useless object; and the dissection and analysis of the anatomist, however careful and minute, is unable to reproduce the real eye, the eye that was in union with the whole organism, with life, with the mind, and through the mind with the Universe. The leaf which has fallen from the tree has ceased to be a leaf; and if we continue to call it so, it is from the remembrance of its former connection with the whole plant. But as soon as this connection is broken, its growth, its beauty, and all its other functions and purposes, are broken also. Thus it is with Science. Science which disconnects and scatters knowledge, and breaks asunder the unity of things—the golden chain from which the Universe is suspended—converts a full, concrete and living being into an unmeaning, lifeless and purposeless object. Moreover, by admitting that Science is not a system, we admit that knowledge may be gathered at random, and that we are able to obtain it without deducing and disposing our thoughts and inquiries according to their natural and necessary connection—an opinion contradictory to the very notion of science, as well as to the universal nature of things, since nothing can either be rationally thought or exist which is not a system. The beauty, the proportion, the unity, we admire in the Universe is nothing else than a systematic arrangement—an arrangement which is not confined to the general outline and to the framework of the structure, but extends to all its parts and penetrates into its most minute details, thus filling alike the intellect and the imagination with wonder and delight. This applies equally to Science; for, whether Science be considered as the representation of the Universe, or the Universe as the representation of Science, the conclusion to be drawn, in either supposition, is that knowledge must be a system, and consequently that where there is no system there must be error, confusion, a medley of inordinate and irreconcilable elements. For to gather knowledge unsystematically is either to take up questions, notions and principles at ran-

dom, without defining their nature, meaning and bearing,* or to consider a part as if it were a whole,† or the whole as if it had no parts and could exist without them‡; or to bring together things irreconcilable, and to separate things necessarily connected; or to confound things that are distinct by mixing their provinces, and forcing the nature of one upon that of the other§; or to admit or deny in a certain form the the very same things that had been denied or admitted in another.||

* Thus it is, for instance, that we use the notion *infinite*, applying it indiscriminately to different objects, and saying that *God* is *infinite*; that *Space* is *infinite*; that *Number*, *Beauty*, &c., are *infinite*, without inquiring what an *infinite* being is or can be, nor how these various objects can be *infinite*. We deal in the same manner with other notions, and the most important, as *God*, *Force*, *Being*, *Object*, &c. For instance, we say, *God* is a *Being*. *Man* is a *Being*, the *Plant* is a *Being*, without inquiring into the meaning involved in the notion *Being*, or if it is the same notion which is applied to these different objects, and, if the same, how it can be applied to them.

† This is the way in which the different parts of Science are generally handled: Logic, Metaphysics, Ethics, Psychology, Art, Religion, &c. are considered irrespectively of each other, and as if each of them constituted a whole. And within the province of each separate branch of knowledge, particular subjects are handled in the same manner. Hence exclusive, one-sided theories, as, for instance, in Psychological Science, the theory that deduces the whole mind from sensation; in Morals, the theories which identify all motives either with pleasure or with interest; in Art, the theories that concentrate beauty either in *form* or in *expression*; in Politics, all theories which, instead of embracing the various wants, tendencies and interests of the social body, single out some particular want or principle, and violently merge, as it were, the whole body politic into it.

‡ When, for instance, we say that the *cause* is perfect without its *effect*, or the *substance* without its *accidences*. Under the same head may be ranged those doctrines which strip a substance or a principle of its attributes, modes, or qualities—matter, for instance, of color, form, weight, &c.—the soul of sensibility, will, imagination, &c.—which they consider as *non-essential*, pretending that matter or the soul could exist without them; just as, in another province, some politicians would banish force, inequality, war from the State, which they consider as *unessential* elements of social life.

§ This is one of the most common errors, as it is difficult to draw an exact line of demarcation between the various beings and spheres of existence. Thus it is that we transfer from one being or from one province of knowledge or existence to another the qualities, laws, and attributes, which belong only to the former. In this respect the inductive and analogical processes are the greatest source of inadvertencies and misconceptions.

|| This inadvertency may be frequently observed in common life, where men will admit the very same proposal, opinion, and principle, they had formerly rejected, and which they would still reject unless it were put to them in a different form. Instances of the same error are not uncommon in science and in the most important questions. For instance, there are doctrines which draw an

We say, then, that absolute Science is *one*, and that it is one as a system.

But to know in the absolute sense of the word is not only to *think* and to *apprehend*, but to *be* the object of knowledge. In fact Science is neither *Thought* without *Being*, nor *Being* without *Thought*, as neither *Thought* which involves no real object, nor any real object which is not thought, constitute Science. Science is therefore the unity of thought and being—the object thought—or it is *Thought par excellence*, thought which is become adequate to its object, and in the nature of which the object has been so merged and absorbed as to make one and the same thing. The unity of the Universe is not to be found in the absolute *Being*, or in the absolute *Substance*, but in the absolute *Thought* and *Knowledge* in which the *Being* and the *Substance* as well as all other principles are involved, and attain their highest and fullest existence. *Being* and *Substance* without Science are like the body without the mind, or Nature without the Spirit.

We say, then, that to *know* is to *be*, and I will add that it is to *be* in the fullest acceptance of the word. The difficulty we find in perceiving the truth and importance of this principle is mainly due to a deficiency in the training of our speculative faculty, which keeps our mind within the bounds of sensation, of experience and induction, and conceals from its sight other and higher realities—realities without which experience itself, and all things appertaining to it, could neither exist nor be apprehended. In fact, if we start from experience,—holding it as the criterion of reality, the identity of *knowing* and *being*, is, I admit, inconceivable. For to apprehend a tree is not to *be* a tree, and to apprehend the fire is not to *be* the fire and to burn; so that here thought

absolute separation between the substance of God and the substance of the world, and then when they come to determine the nature and attributes of the Godhead they realize them in conformity with our own, assigning to God our own faculties—a Personality, a Consciousness, a mode of loving and governing the world modelled upon our own corresponding attributes; so much so, that, according to this manner of viewing the subject, the popular dictum, that *man is made in the image of God*, ought to be reversed, and said that *God is made in the image of Man*. It will be observed that formal Logic is unable to supply any rule or criterion by the aid of which the mind could guard against these or other similar errors, as it is only by inquiring into the *matter* and objective nature of things that they can be discovered and avoided.

and its object are beings distinct and separable. But if we admit, as we must admit, that besides and above the visible and experimental there is an invisible and transcendent Reality, that this latter Reality is the principle of the former, and that, being beyond the reach of the senses, it can only be apprehended by pure thought—by thought freed from sensation and all experimental elements—the difficulty will be more easily solved.

To elucidate this point, let us consider the two propositions, *God is—This flower is*. Here, deceived by the identity of the word *is*, and by the habit of picturing to ourselves all reality in a material and sensible form, we apply to the word the same meaning in both instances, and thus are led to realize the *Being* of God as the *Being* of a flower or of any other object falling under the senses. Now, it may be easily perceived that the meaning involved in the *is* of the one proposition is entirely different, nay, the reverse of that which is involved in the *is* of the other. For the *Being* or the *to Be* of God is not the *Being* of the flower, and were we to conceive His Being in any manner similar to that of an external and phenomenal object, not only would we distort but suppress at once the notion and existence of God. Consequently, when we say that God *is*, we mean, if we mean anything, that He *is* in a purely *intelligible* and *ideal* manner, and that He can be apprehended through that faculty which alone is able to reach the eternal and the absolute, by whatever name it be designated, whether it be called *Reason*, or *Intellect*, or *Speculative Thought*. Whence it follows also that the existence of God is quite the reverse of the existence of finite and phenomenal beings, and that, in order to form a correct notion of Him, we must strive to remove from our mind all trace of experience, and set its visual power, so to speak, in antagonism with it. And these considerations not only apply to God, but to all principles, causes, and essences. For neither God, nor any principle whatever, can be apprehended through experimental process, and it is only by a fallacy and delusion of the inductive method that we are led to believe that metaphysical science can be founded on experimental knowledge; it is from inconsistency, and by leaping over instead of filling up the gap—nay, by tacitly and un-

wittingly presupposing the very notion and principle it professes to draw from its operation—that experimental method concludes the infinite and eternal from the finite and temporal. Were it consistent, as phenomena, facts, effects—all, in one word, that comes within the pale of experience is changeable and perishable—the conclusion ought to be that principles, causes, and essences, are changeable and perishable also. Thus, for instance, as *motion, force, light, heat, &c.*, when *considered* in particular phenomena, are continually perishing and reviving, the inference would be that the principles of these phenomena are subject to the same alternate movement of destruction and revival; or that the cause, whatever it be, that produces man is mortal, because man is mortal—and similar examples—which would be simply absurd, as nothing could be, nor be restored to life when destroyed, if its principles were liable either to alteration or destruction. Accordingly, the nature and knowledge—the Being and Knowing—of principles and essences, differ from the nature and knowledge of their products—facts, phenomena, effects. And if we contrast the former with the latter we shall see, 1°. that, for the very reason that the former are the creative essences of things, their nature remains unimpaired and undiminished in the begetting of them; 2°. that they possess a *purely ideal and intelligible* nature,—indeed they are *ideas*, as we will see hereafter, and as such they cannot be *felt*, or brought within any sensuous shape, or any point of time and space, but only be apprehended by pure thought; 3°. that, from their being creative essences, they produce the effect without mingling their eternal and impassible nature with it, like the hand, or, still more truly, like the mind, that produces the work without being reacted upon by it and receiving the imprint of it; thus it is that Death destroys without destroying itself, and fire burns without burning itself out;* and 4°. that, because of their possessing a *pure and intelligible* nature, thought can think them in their intelligible existence—thinking the fire, for instance, the light, the air, as well as the Good, the Beautiful, &c., and when thinking them

* This elucidates the theory of the *First mover* of Aristotle, namely, of the Mover who moves All without moving itself, or being moved.

in their objective and essential nature, being the fire, the light, &c., &c., and keeping clear at the same time from their effects.

§ 3. *On Thought.*

This will be better understood if we give a deeper insight into the nature of Thought, of Science, and their eternal and inseparable object—namely, Ideas, and the relation in which they stand to each other.

To know is to think, and it is to think in the highest sense of the word. Now thought is not only the faculty from whose inexhaustible depths springs all knowledge, but it constitutes also the highest essence and the culminating point of existence. The old adage that man is a microcosm has only a meaning when applied to thought. For thought alone possesses the privilege, shared by no other faculty or being, of thinking itself and all other things, and of thinking them as within itself, and as objects not only cognate to, but identical with, its own nature. There is no being, whatever be its nature and properties, there is no point of space, actually or possibly, without the reach of thought. The infinite and the finite, the invisible and the visible world, the numberless variety of beings with their numberless qualities, difference and opposition, all equally meet in the depths of thought as in their common centre. Indeed it is in thought that the Universe attains its highest perfection. The external world, by being thought and in thought, is made partaker of a dignity, beauty, and perfection, it does not possess in itself. For it is *within* the mind that Nature attains its ideal and essential existence, whilst *without* the mind Nature's existence is fragmentary, scattered, destitute of inward bond or unity. It is

* As far as we can conceive God. But this must not be lost sight of, namely, that God, like all other things, is only known to us through thought, and that beyond thought His being is for us = 0. It is one of the popular inadvertencies to believe that we can reach God through any other faculty—*sentiment, intuition*, or whatever be its name—but thought. although sentiment and intuition are only inferior forms of thought, or thought which is still mixed with sensation, and unable to perceive truth in its pure essence. We possess the sentiment of God as we possess the sentiment of ourselves, of mathematical truth, and of all things in general—which sentiment is a dim perception of these objects, or confused and imperfect thought, involving inconsistencies and delusion, a mixture of light and shade, of truth and error.

an external juxtaposition of beings unconscious of themselves as well as of their mutual connection. Nor can we conceive, either in God or in man, anything more excellent than thought. Indeed it constitutes in both the very excellence of their nature.* In man, his whole being, so to speak, supposes thought, and is thought. Take away thought from him and he ceases to be what he is, the most wonderful amongst created beings, and he will find himself lowered to the level of the brute and inanimate creation. All his activity, internal as well as external, flows from thought; and there is no manifestation of it, from the most profound researches and the highest soarings of imagination to the most humble occupation, in which thought stands not foremost and is not the motive power of action. Will, imagination, memory, self-consciousness, and even the faculty that stands, as it were, on the limit of the physical and the spiritual worlds, of the body and soul—Sensation I mean—are not merely impelled by thought, but thought is their essential element—nay, they are different forms or instruments of thought. For there is thought in *Sensation* as well as in any other faculty and mental operation, and not only is it through thought that sensation is inwardly felt by the soul, but the external object that produces sensation is likewise apprehended by it. Thought constitutes, therefore, the unity of the human being, of mind and body, and of their connection with the universe*; and if it constitutes the highest essence and per-

* Those who place this unity in the brain as the centre of the nervous system, or those who *localize* the soul by assigning it a particular place, either in the brain, like Descartes (*glandula pinealis*), or in any other part of the body, are deceived by external and sensuous representation which lead them to assimilate the unity of the soul to something like the spider feeling in the centre of the cobweb the insect that skims over its threads. But quite different is the unity of the human being. Here the centre is everywhere and nowhere; and the sensation is not felt in a central point, but all over the body and in every part of it. Moreover, all sensation, however different and opposite—as the sensation of pain and pleasure, of light and darkness, of heat and cold, &c.—may be compared and brought into a unity, though felt by different senses and in different parts of the body. From the fact that we feel thinking in the brain, and that the more intense is thought, the more it seems to concentrate itself in this part of the body, it does not follow that thought has its seat in the brain, and much less that the brain is the faculty of thinking, but merely that the brain is the *main* instrument of thought, as the eye is the instrument of vision and the ear of hearing. I say the *main*; for all the senses and organs of the body are instruments of thought, as

fection, it follows that everything is made for it and is subordinate to it; that it is thought that will impart light, vigor and life to individuals as well as nations, and that where the internal activity of thought is declining there the external also will languish or become extinct. Such is thought, the most stupendous of beings! In the presence of Nature, before the huge masses that move in space, the vast expanse of the water, the sun and the planets, and the bodies innumerable with which the vault of heaven is studded, we are struck with wonder and awe. How much more will thought appear worthy of our admiration if we bear in mind, that not only these objects but the Universe is concentrated in thought, and that the ultimate reason of all that exists and will exist is apprehended by thought, and is thought! For thought that constitutes the excellence of the human, constitutes also the excellence of the divine nature. God is the absolute and eternal thought. This is the highest definition of God, His preëminent attribute and perfection. The omnipotence, the love, the providence, as well as the goodness and justice of God are subordinate attributes and modes of His Being. All presuppose thought, and it is by coming, as it were, in contact with thought, that they attain their highest power and perfection. Thus the love of God is the thought of the eternal ideas which are His perfection, a love embracing the love of Himself and the love of the external manifestation of ideas, or the World; which shows that the love of God towards the world cannot be love towards individuals, nor even towards nations, but towards the Whole, and that the parts are only loved by God inasmuch as they harmonize with the Whole, and contribute to its preservation and the fulfilment of the law, which is the eternal thought of God. And thus it is that what is wisdom and love in the sight of man may be foolishness and hatred in the sight of God.

it is not the eye that *sees*, nor the ear that *hears*, but it is thought that sees and hears through the instrumentality of the organ. Besides, any theory attempting to explain the unity and nature of thought, or the unity and nature of the human being, by some organic function or arrangement, will run aground not only against abstract and speculative arguments, but against experience itself. For it is a fact that thought apprehends the infinite, the eternal, and the absolute, and consequently cannot be circumscribed within the bounds of corporeal organs.

This applies also to His Providence. The providence of God is His eternal and immutable thought, which is the law out of and according to which all things are made and governed. The government of the World is implied in the very essence of things, as everything must be made and governed according to its special essence. Therefore to *think* is in God to *govern* and to *foresee*, and to *govern through* and to *foresee* in the immutable essence of things. This is the rational notion of the Providence and Prescience of God, the only notion in conformity with the majesty and excellence of His nature. To realize God as actually foreseeing and regulating all single and daily events, all transient phenomena and accidents, is to degrade and lower Him to the level of finite beings.

NOTE.—The popular doctrine is that God not only governs the world through general laws, but that His Providence extends to all particular events, and to the minutest details of this vast and wonderful machinery. For it is agreed, if there were events—nay, one single event—that should not be predetermined by God, God's Providence would not embrace all things, and consequently God would not be All-powerful, which is contradictory to the notion of the Deity. The same argument applies to His Prescience. Those who rest their doctrine on this and similar arguments do not perceive that they fall, and still more deeply, into the difficulty they pretend to avoid; for against this mode of arguing it may be retorted, that if it be contradictory to the notion of God that God's Providence should not embrace all things, it is much more at variance with the whole of His nature that He who is the Absolute and Perfect Being should busy Himself with individual beings and particular and transitory events, however unworthy they may be of His providential care. But we deal with God in a more off-hand way than we are wont to do with our fellow-creatures. For we would think it derogatory in the sovereign to descend from his high station and perform menial or inferior duties, or in the judge to carry out with his own hands the prescription of the law; but with God we are not so considerate and reverential, and He must have a hand in all our daily affairs, no matter how irreconcilable they may be with His majesty and perfections. And this is done to shield Him, as it were, from imperfection, and to describe Him in the fulness of His nature and existence! The fact is that such representation of God is sheer anthropomorphism; nay, it is the heathenish conception of the Deity, glossed over with a kind of nominal Spiritualism. For, in reality, we make Him love, foresee, and govern, as we do love, foresee, and govern; and we force upon Him what we call our Personality and Consciousness, adding, it is true, that all such attributes and faculties are *infinite* in Him, but taking care, at the same time, not to state what an *infinite* Love, an *infinite* Providence, an *infinite* Personality is or can be. In fact, if the matter were more closely gone into, it would become manifest that an *infinite* love, an *infinite* personality, &c., are mere vain and empty words, calculated only to mislead the mind, if we realize God's love and personality like man's. The heathenish representation of God would then be at least more consistent. For if love in God be what love in man is, God must love as man does;

and if God's government of the Universe be what man's government is, Jupiter must convene his council in Olympus as Agamemnon in the camp, and frown when in anger, and drink and eat as man does when impelled by thirst and hunger, except that he will partake of some unknown and immortal nourishment. And what is still stranger in the matter is, that if any one come forward and suggest that these and the like representations of God—namely, all representations drawn from experience, analogy, and induction—are not only inadequate, but fallacious and at variance with the very nature of God; and that the only way by which we can form a correct and true notion of the Deity is through purely intellectual and speculative processes, as God is not only a Being that no experimental process can reach, but rather the reverse of all we know through experience;—if any one, I say, come forward and hold such a doctrine, some will object that they do not understand it, and that it is too subtle for their perception; others, that they have neither leisure nor taste for such inquiries, and that they rest satisfied with the popular and current notions on the matter; and finally, others, that all speculation is the delusion of a visionary brain that mistakes its own phantoms for realities, not unfrequently exciting against it popular ignorance and prejudice by branding it with the name of Pantheism, of Atheism and Infidelity. Surely, if there be Atheism and Infidelity, all doctrine that inculcates an irrational and erroneous notion of the Godhead deserves such a name; and if there be Pantheism, the doctrine that teaches that God predetermines and foresees everything, and that there is not a single event in which God has not a share, is Pantheism of the coarsest description. That God is All, and that all things are in God, is a sound—nay, it is the only rational doctrine. For all things must come from God, if they do not come from nought; but if they come from God, were they even created *ex nihilo*, there must be something of God—a spark of the divine essence—in them. Consequently, those who hold that God is in the World, and that the World is in God, hold a rational tenet. In fact, this parental connexion of God with the World is that which, on the one hand, imparts to the World and to everything that is in it whatever being and perfection they possess, and which, on the other hand, completes, as it were, the perfection of God Himself. For if we separate, substantially and absolutely, God and the World, we do not only impair and curtail the being of the World but that of God also. We curtail the being of the World, by separating it from its principle; we curtail the being of God, by admitting that the substance of the World is independent of God, and, consequently, by admitting *two absolute substances*. And the *creatio ex nihilo* would not fill up the gap, as the *creatio ex nihilo* could not affect the principles and essences of things, which under any supposition, must be coeternal with God. But if God be All, He is not so in the sense that He is every individual being and every single phenomenon—so that if I am joyful or sorrowful He should rejoice and grieve with me, or that He should be the insect that crawls or the seed that grows upon the earth—but in the sense that He is the principle of all things, and that all things find their ultimate reason, their essence, in Him. Thus, being the principle, He is not what the thing is of which He is the principle. And, being *All* in this high sense of the word, He is not what the individual and fragmentary part is. It is because joy and sorrow, as well as life and death, come from Him, that He does neither rejoice nor grieve, neither come to life nor end in death. For should He come to life or end in death He could give neither life nor death; and if He felt joy and sorrow as we do He could be the principle of neither, as they would be sent to Him as they are sent to us. Besides, being All and the Absolute, He is liable neither to want, nor loss, nor to any increase of perfections, which are

the conditions of joy and sorrow and of all similar modifications and changes through which the finite and mortal being must pass. Again, the seed that *becomes* and the seed that *is* (the essence) are two different seeds. The former we see and touch, the latter we think only. But that which we think only, is eternal and immortal. God is the *Thought*, the *Idea*, the *Essence* of the Universe—this is the highest and absolute definition of God, a definition in which are comprised His Providence, His Love, His Power, and all His perfections. For the Thought of God is the Providence of things, and, for the very reason it is the essence, it is the Providence of each being particularly. The Providence of the plant is its *idea*, according to which it is born, it grows and dies. And so it is with everything. And, knowing and being the idea, God need not extend His care to individual beings, as not only the knowledge and being of the latter are involved in the knowledge and being of the former, but they find in the former their highest and perfect existence. Thus, for instance, in the knowledge and being of the ideal triangle are comprised all material triangles, whatever be their size, form, and position, as in the knowledge and being of the ideal man—genus or species—are involved the knowledge and being of all men. Consequently, it must be laid down as a fundamental principle of metaphysical science that God is in the World, and that He is not in the World; that He is *All* things in their idea, and as a Whole, and in the Unity of their existence; and that He is not All things individually, or in their particular and fragmentary existence.

CHAPTER IV.

§ 1. On Ideas.

The universality and unity of Knowledge as well as the universality and unity of Being require a principle which should extend to all things and embrace all things in the unity of its nature. This principle, we have seen, is Thought. Viewed in this light the various branches of knowledge may be considered as constituting the various branches or stages of Thought, and then, according to this notion, Logic would represent a special province of Thought. But it will be easily perceived that this mode of viewing Logic, though abstractly correct, cannot convey a concrete and full notion of this Science unless we previously define the object of Thought in general, the *subject-matter*; or, to use more familiar expressions, the principles and laws with which Thought is invariably and absolutely concerned, as well as their import and bearing with relation both to Knowing and Being.

This leads us to the fundamental and decisive Problem of Science, the Problem which lies, under various forms, at the bottom of all others, and constitutes, as it were, the keystone of the whole edifice, I mean the Problem of Ideas. The two main points we shall have to elucidate on this subject are

- 1°. The relation of Ideas to Thought and Knowledge, or what has been termed the *subjective and psychological Problem of Ideas*.
- 2°. The intrinsic value of Ideas, or the Ideas considered in themselves and in their essential existence, i.e. the *objective and ontological Problem of Ideas*.

It must be observed that these two Problems are but two aspects of one and the same thing, and may be comprehended in a general query, namely, "Are Ideas at once the principles of Knowledge and the principles of Being?"—a point which must be constantly kept in view in the course of the following investigation.

If to know is to think, to think is, in its turn, to possess the idea of the object apprehended by Thought—Thought

and Idea are inseparable. Thought embodies itself in Idea, and Idea embodies itself in Thought. Where there is no idea there is no thought, and where there is no thought there is no idea.* The clearness and fulness of Thought are in proportion to the clearness and fulness with which Idea is apprehended by it. To possess distinct and complete ideas is the natural impulse and the most inward want of Thought; and to evolve them out of the obscure and confused mass of facts, images, and sensations, incessantly flowing into the soul, constitutes its permanent labor and highest enjoyment. Sentiment, heart, feeling, intuition, are, as we have already observed, inferior stages or forms of Thought. Here thought is still enveloped in nature and sensation, not having reached the clear and pure perception of ideas. Yet, even at this stage, Idea is present, though dimly, in Thought; and whatever value and truth the latter possesses, it is from Idea it is derived. The sentiment of God, of the Beautiful, of the Soul, of any internal or external object, is inferior to the clear perception—the idea—of them. But whatever truth is in it, it is Idea that imparts it. Let, for instance, the idea of God be erased from the mind, and with the idea all perception and sentiment of the Deity will be extinguished.†

But, in order to establish still more incontestibly the inti-

* Ideas cannot exist in their general form and unity—i.e. as ideas—in nature and without Thought. From which will also be seen that those who, like Spinoza or the Materialists, see in *Substance* or in *Matter* the universal principle and substratum of things, overlook the fact that *Substance*, *Matter*, *Being*, as well as the *Good* and the *Beautiful*, are attributes or essences subordinate to Thought. For Thought comprehends them, whilst it is not comprehended by them. And it comprehends them in the twofold manner in which we use the word; for it *understands* them, and, for the very reason that it understands them, it contains them in the manner in which Thought contains all things—namely, spiritually and ideally—in their highest form and perfection.

† It may be said that the progress not only of Science but of Religion is nothing else than an evolution of ideas. For instance, all Religions are founded on the belief in the existence of God, and in this respect there is no difference between them. Consequently they can differ only in the manner in which they realize God. And it is immaterial whether it is through Faith or through Science that God is realized: for in both cases there must be a notion of God; and the more correct the notion, the truer the Religion. Those who pretend to found Religion exclusively on the Word of God, forget the simple but most glaring fact that the Word of God must be apprehended and received by the mind, and consequently that the mind must possess some notion through which it perceives the existence of God and the truths contained in His Word.

mate connection of Thought and Ideas, let us analyze Thought in its most rudimentary operation, in that state in which it hardly distinguishes itself from the external world—I mean *sensation*. For there are those who will admit that Thought cannot think God, the True, the Beautiful, and other transcendent objects, save through an idea, but who will not acknowledge the idea of *sensation*. However, it is easy to see that the *idea* of sensation is as necessary to apprehend sensation as the ideas of God, of the Beautiful, &c., are necessary to apprehend God and the Beautiful. For sensation, to be felt, must be thought, and thought as something determined, and different from any other phenomenon and subjective modification. Now what determines Thought in sensation is the idea of sensation, as the idea of triangle determines thought in the apprehension of the triangle, and the idea of God in the apprehension of God. It may be supposed that it is the external object that produces both the organic modification—the impression—and the internal apprehension of the phenomenon by Thought. But it must be observed that the external object as well as the organic modification that follows the impression are converted into mental phenomena by their coming in contact with Thought, and consequently they are unable to produce an effect which it is beyond their nature and faculty to produce. Moreover, the very idea by which the mind apprehends the corresponding phenomenon must needs be previously contained in Thought, and cannot be imprinted in it as an image in wax. For, on the one hand, ideas are neither images, nor symbols, nor any material representation, but pure and merely intellectual elements, and, on the other hand, not only do they precede the impression, but before and after the impression they distinguish themselves from it.

This brings before us the *vexata quæstio* of the origin of Ideas, a question which in our days and since Kant's labor has lost much of its importance,* but upon which I have deemed it necessary to dwell at some length, as to form a

* Because since Kant it has been more clearly perceived that the main and decisive point in the problem of ideas is not to determine whether ideas are innate or derived from experience, but what is their objective meaning and function; in other words, their essential and absolute nature.

correct and clear notion of the nature of ideas we must embrace them in their various aspects; and, besides, the elucidation of this point will pave the way to the solution of the ontological problem.

If Thought and Ideas be inseparable, either ideas are given with and in thought, i.e. are innate, or not only ideas but ideas and thought must equally be derived from experience. This is the real and rational position of the problem, and when considered from this point of view its solution will more readily be arrived at. In fact, those who deny the innateness of ideas will perceive that they deny at the same time the preëxistence of the mind to sensation and experience. To hold that the mind alone precedes experience, but ideas are gradually brought into the mind by it, is in reality to hold that the mind is not the mind, if it be true that the essential business of the mind is to think and to know, and that there is neither thinking nor knowing without ideas. But, even granted that the mind and ideas were not so intimately connected as to be inseparable, the very fact that the mind is *capable of forming* ideas (a fact which those who pretend to draw our mental constitution and activity out of the materials furnished by experience are obliged to admit, but which they explain by the process—equally possessed by the mind—of generalization), this very fact, I say, shows how untenable the ground is upon which the sensualistic doctrine rests. The capabilities of a being constitute its nature, and the bringing of them into play constitutes its actual existence and operation. The capability of wood is to burn and that of powder to explode, and these capabilities are involved in their inward and essential constitution. So likewise the capability possessed by the mind of forming ideas is nothing else than the preëxistence in the mind of these very ideas; which means, in other words, that to think through and according to ideas is what constitutes the mind's whole essence and activity.* And we shall arrive at the same result if we

* The so-called laws of Thought are nothing else than *ideas*. For instance, the laws of *causality*, of *action and reaction*, or that *the whole is greater than the part*, &c., are only ideas and relations of ideas, such as cause and effect, action and reaction, etc., and it is by applying these ideas to phenomena that we name and distinguish them. As we handle here the problem of ideas in a general way, we will not enter into the question relating to the difference between *category*

examine the manner in which experimental philosophers profess to explain the formation of ideas, namely, the well-known process of generalization. In fact, generalization presupposes ideas; for to generalize is, according to the definition of these philosophers, to deduce from individual, transient and scattered phenomena a general, fixed and indivisible notion. Now it is plain that this result would be unattainable unless the very notion which, it is pretended, is brought out by this operation, preëxisted in the mind; for it is the presence of the notion in the mind that induces the latter to generalize, and therefore, were the notion abolished, the generalizing process would cease with the principle that produces it. To speak more correctly, there is no generalization at all, and what is called generalization is merely the successive and partial application of ideas to single phenomena. Let us take an instance, the general idea of man. According to the empirical doctrine this idea would be formed in the following manner: We perceive through the senses a certain number of men, we abstract from each individual man some common qualities, and these common qualities which are scattered in each individual we combine and unite so as to compose the general notion, *man*. This process seems very simple, and well-adapted to account for the presence of ideas in the mind, whilst it escapes the popular argument directed against this inneity, and founded upon the fact that we are not aware in childhood of possessing any general idea, our mind being then exclusively occupied with sensations and phenomena of the obscurest and most fleeting kind—a fact showing, it is assumed, that ideas are subsequently and gradually formed upon materials furnished by experience. This argument, I say, seems very simple, and the more cogent as it is founded upon psychological experience; but it will be seen, upon close examination, that it mutilates and perverts the very experience from which it is deduced. In fact, if things were to take place

and *idea* as established by Kant. It will suffice to say that what Kant calls category is nothing else but the idea, taken only in its abstract form, as a form or element of the *understanding* (*Verstand*), and not in its concrete and real unity, in its systematic existence, and as it is in *reason* (*Vernunft*), which constitutes the *speculative idea* in the strict Hegelian sense.

as it is stated, ideas would come from naught; for whence could ideas be derived, experience supplying only individual, fugitive and isolated elements? And how could these elements be collected and so combined as to form a unity, if this unity—the idea—do not preëxist in Thought? Besides, each of these particular elements—sensations, phenomena, and representation of material objects—in order to be transformed into a general notion, must be singled out, determined, and named (the first as well as the second, and the whole series), as it is presented to the mind, otherwise it would mean and represent nothing, and then the pretended formation of ideas could not take place. But to *name* and *discriminate* a phenomenon a preëxisting idea is necessary, and the very idea to which the phenomenon is referred, let it be a man, a sensation, a phenomenon of light, of heat, &c. For when we generalize the different men, or phenomena of light, heat, &c., we do not generalize indiscriminately or in an indeterminate manner, but we refer each successive representation to a distinct idea, which for the very reason that it *names* and *determines* each of these phenomena distinguishes itself, as we have already observed, from each of them, and consequently must need precede them as well as continue after they have disappeared.

With regard to the other part of the argument, namely, that ideas cannot be inherent in the mind because we are not conscious of their presence in childhood, it comes to this, that there is no law regulating our digestive or visual power, or any other organic function, because we digest, see, walk, without being aware of, or inquiring into, these laws; and, agreeably to this criterion, it ought to be said that these, or any other laws, begin to exist only when we become aware of them, and not before; and straining the consequences, that they exist for those who are conscious, but not for those who are unconscious of their existence. This is the real import of the argument, which shows that it is no argument at all. In fact, the *subjective* state of the individual, his consciousness or unconsciousness does not in any way affect principles. Principles, laws, ideas, exist and produce their effects whether he be conscious of their existence and operation or not. And if it be recollected that this state of unconscious-

ness with regard to principles is not confined to childhood, but extends to mature age and all periods of life, and that this transition from unconsciousness to consciousness, from ignorance to science, takes place in some—and these the very few—men's minds, whilst others—the greatest number—live in a state of unconsciousness and ignorance, the hollowness of the argument will become still more apparent. The part experience plays in the development and training of the mind is to awaken attention and reflection, which in some are directed towards the general, the absolute and the eternal, whilst in others they do not rise above the particular, the relative, and the temporal. But experience produces nothing; it does no more produce ideas than the mind, its instincts, tendencies and faculties, or the body and its functions. The objection drawn from the fact that without the help of experience and of the senses we could not possess the physical ideas of *color, light, sound, &c.*, goes so far as to prove that experience calls the attention of the mind to ideas through the sensuous representation of them, and that these representations are apprehended by the mind through the instrumentality of the senses, but not that experience is the principle and the source of ideas; for *representation* and *ideas* are entirely distinct, though they are generally confounded.* The sound that I hear is not the idea of sound,

* It is a confusion generally occurring in the popular and irreflective mind which makes use indiscriminately of the word *idea* to designate the particular and the general, the phenomenon and its principle. This confusion is one of the greatest obstacles to the right understanding of idealism, and it is of the utmost importance that the philosopher should by an appropriate training be enabled to avoid the confusion, and to distinguish between representations and ideas. Descartes, to mark this distinction, has recourse to the following example: "I can," says he, "represent to myself a triangle. I can also realize a pentagon or a decagon, though not so distinctly as a triangle. But as the number of sides and angles increases, the representations become more and more difficult and indistinct, until they vanish entirely. For instance, I cannot in any manner represent to myself a chiliagon; and yet, although I am unable to realize it, I can define it, and determine its properties, as clearly and rigorously as those of the triangle—an operation showing that I possess the idea of the chiliagon which I apprehend through pure thought" (*intellection* is the word used by Descartes) "without the assistance of any sensible representation." Similar examples may be found in all departments of knowledge. For instance, we can form sensible representations of the rapidity of a horse, or of a small distance, but cannot form sensible representations of the rapidity of light or of a long distance, though we can equally measure and determine both. However, such examples are not needed

but the image and the symbol of it (we will see hereafter that it is its effect and product); and when I hear a sound, two different events take place in my mind—though both apprehended and distinguished by Thought, i.e. the *representation* of the particular sound and the perception of the idea that imparts to the latter, whatever value and meaning it possesses—of the idea which, as we have already observed, was in my mind before the sound was perceived, and will continue in it ready to apprehend all similar phenomena, and which has perceived, is perceiving, and will perceive them in the minds that were, that are, and that will be.

We must then admit that ideas are innate, and that, far from originating with experience, they are presupposed by it, so that were the mind deprived of ideas no experimental object could reach the mind, nor be apprehended or named by it.

The question now arises whether all ideas be innate, or whether only some of them be so. For there are philosophers who acknowledge the innateness of ideas, but only of some of them, and who consequently make a selection, single out some of them as innate, and consider the rest as adventitious (generally dividing them into metaphysical and physical or primary and experimental ideas, calling metaphysical or primary the ideas of God, of the Infinite, the Beautiful, the Good; or categories, such as the categories of Quantity, of Unity and Plurality, of Substance, Action and Reaction, &c.), and physical or experimental all ideas relating to external objects. Now it will be seen that this distinction is founded neither upon speculative nor upon experimental grounds. For, if we bear in mind that inasmuch as they are all ideas, they must partake of the same nature and flow from the same source, we shall come to the conclusion that either they are one and all innate, or that none of them are. In fact, the difference which distinguishes them bears upon their

to perceive the distinction between *representation* and *idea*, and, though they help the inexperienced, they may, on the other hand, mislead him by making him believe that we can represent to ourselves the idea of *triangle*, for instance, whilst the fact is that we can no more form a representation of the idea of triangle than of the idea of the chiliagon or of any other object. What we represent to ourselves is a particular triangle, but not the idea of it, which, like any other idea, can only be apprehended by pure Thought.

objective meaning, i.e. the various aspects or qualities of being they express—the *Beautiful*, *Justice*, *Color*, *Light*, &c.—but it cannot in any way affect their origin. Why, for instance, the idea of the *Infinite* should be innate, and the idea of *Light* should be acquired? Are they not both ideas, and do they not fill, each in its own sphere, similar functions? When, to prove the dissimilarity of their origin and nature, it is argued that the idea of the *Infinite* cannot be deduced from the *Finite*, as the latter will always remain so whatever be the perfections with which the mind will endow it, and consequently that the idea of the Infinite cannot be drawn from the Finite, whilst the idea of Light, or any other physical idea, is produced by the direct apprehension of corresponding phenomena,—an argument is brought forward which rests on the confusion, I have just pointed out, between *representation* and *idea*, besides overlooking other vulnerable points which lay it open to other objections. For it will be seen that, in this argument, we have, on the one hand, the *idea* of the Infinite, whilst, on the other, we have not the *idea* but the *representation* of Light. Had *Light* been considered, like the Infinite, in its idea, it would have been perceived, as I have demonstrated, that there cannot be such a difference between them, and that we cannot any more deduce the general idea of *Light*, *Heat*, or *Sound*, from luminous, calorific, and sonorous phenomena, than the idea of the Infinite from the apprehension of finite beings. Therefore, as the idea of Light bears the same relation to luminous phenomena as the idea of the Infinite to the perception of the Finite, the argument applies equally to both or to neither. But, setting aside all other considerations, the hollowness of the argument will be more readily discovered by directing the attention to its general purport, and to the principle upon which it is grounded. It is there assumed that the idea of the *Infinite* and that of the *Finite* cannot be traced back to a common source because of the impossibility of deducing the former from the latter. Now if we grant the impossibility of the deduction, we must admit at the same time that the impossibility affects both terms and their mutual relation. If so, the converted proposition will be equally true; I mean that, if it be true that the *Infinite* cannot be drawn

from the *Finite*, it is equally true that the *Finite* cannot be drawn from the *Infinite*; for if, by indefinitely enlarging the boundaries of the *Finite*, we would never reach the *Infinite*, and as, on the other hand, we could discover no limit in the *Infinite*, we would equally be unable to descend from the *Infinite* to the *Finite*. Therefore, both ideas being, in this respect, identical, the only inference to be legitimately drawn is, that they issue not from a different, but from one and the same source. Thus this famous argument upon which eclectic idealism mainly rests, is found, on close examination, to be no argument at all. The fact is that ideas are all innate, and they are all innate because of their being all ideas, namely, purely intelligible principles constituting the components and indivisible elements of intellect and thought. They are also innate because of their being the immutable and eternal principles of Knowledge and Being. This leads us to the consideration of the other—the objective and ontological—aspect of the Problem.

§ 2.

What we have now to consider is the objective nature of Ideas, or Ideas in themselves independent of the subjective and accidental state of the individual mind, and the part they play with reference either to Knowing or to Being. This, I need hardly add, is the highest Problem of Science, in whose solution is involved, directly or indirectly, that of all others, and compared with which all other inquiries must be looked upon as preliminary exercises, a kind of mental gymnastic whose object it is to invigorate the mind, that it may reach this supreme object of its labors and aspirations.*

First of all, if, as I have demonstrated (section preceding), thought and idea are inseparable, and where there is idea there is thought, and where there is no idea there is no thought, it follows—

1°. That the limits of thought and the limits of ideas are

* See on this point Plato *passim* in his Dialogues, but more especially in the *Phedon*, the *Republic*, and the *Banquet*. Hegel has admirably and systematically described in his *Phenomenology of Spirit* this metamorphosis of the mind, these gradual evolutions which the mind must go through that it may be enabled to handle pure ideas and deal directly with them.

identical, and that there exists between things and ideas the same relation as between things and thought.

2°. That, as to know is to think, and that where thought ceases there knowledge ceases also, knowledge and idea are inseparable, and, consequently.

3°. That there are as many ideas as there are determinations and objects of thought, and that the more we penetrate into the nature of ideas the more we become possessed of a clear and adequate knowledge of things; whence it follows, also,

4°. That as, on the one hand, there is no being, virtually or actually, beyond the reach of thought, and as, on the other, thought can think no being but through or in idea, there are ideas for all things, i.e. for all beings, modes or forms of existence.*

Yet, although this is a consequence which necessarily flows from the above enunciated principles, we are generally, so to speak, less condescending, in this respect, towards ideas than towards thought. For we readily admit that thought is endowed with the faculty of thinking all things, but with regard to ideas we here deal with them as we did with regard to their origin; we make a selection, and accordingly reject the doctrine that there are ideas corresponding to all things; admitting, for instance, the ideas of *Justice*, of the *Good*, of the *Beautiful*, of *God*, &c., but refusing to admit the ideas of *Body*, of *Plant*, *Organism*, *Light*, &c. It is, as it may be seen, the same eclectic and arbitrary process applied to the present question. In fact, whatever be the conception we form of ideas, whatever the value we assign them—let them be the essence of things, or mere subjective forms of thought—either we must admit that there is an essence, or an absolute form for the *body*, the *plant*, the *light*, as there is one for *justice*, the *infinite*, the *good*; or if we deny it, our denial must extend to both, to the latter as well as to the former.

The reluctance we feel to assign ideas to all things, and the difficulty we find in perceiving this fundamental truth, are mainly owing to our not being sufficiently impressed with

* Plato has laid down this principle in the *Republic* and *Parmenides*, but he has made only a partial and incomplete application of it.

the importance of this principle, namely, that the invisible and the ideal constitute the essential element of all beings, of Nature and Spirit, of body and soul, as well as of their mutual relation. In a general and indefinite manner we do acknowledge the principle, but, as we do not possess a clear perception of it, and do not embrace it in all its bearings and relations, when we come to application, either we totally disregard it, or we apply it in a desultory and arbitrary manner, so as to stultify ourselves and fall into the strangest contradictions. Thus it is, for instance, that we will assert that God is a Being immaterial and invisible, and, at the same time, that He is the Principle of Nature, for the reason that Nature and the visible World cannot contain within themselves the ultimate principle of their existence; which means, and cannot but mean, that the reason, the cause, or the ultimate essence of Nature, resides in God. But if any one set forth the doctrine that Idea is either the principle or an essential element of Nature, we will not listen to such a doctrine, on the ground that we cannot understand how a purely *intelligible* element could be the principle of *matter, space, motion, &c.*, here rejecting what we had formerly admitted in another form, and basing our rejection upon the very same ground on which we had admitted it.

We were, then, right in stating that we must deny or admit the objective reality of all ideas, and deny or admit them on the same grounds. Therefore, if there be the ideas of the Good, the True, the Infinite, there will be also the ideas of quantity, of quality, of number, light, animal, body and soul, life and death,* indeed of beings which seem the most remote

* Physiologists, for the same reason that they do not generally admit the idea of organism (I say, *generally*, for there are some—Burdach, for instance—who admit it), reject the idea of life and death. And yet they endeavor to give a definition of them (see Cuvier, *Règne animal*, Introd., and Bichat, *Recherches sur la vie et sur la mort*). Now, either the definition possesses a merely nominal value, and then life and death would be a compound of words, or it must be acknowledged that there is an idea corresponding to each of them. And this is what, in reality, they acknowledge themselves by endeavoring to describe the conditions and invariable elements which constitute them. It is what, for instance, Cuvier acknowledges, who, after having defined life as the faculty possessed by the body of assimilating to itself, by a fixed and regular process, the environing substances, winds up his remarks by saying that the *form* is more essential to the living body than the matter. Now this *form* is nothing else than

from the ideal world; I mean, matter, phenomenon, and the Self. In fact, all *Selves*, as well as any other being, possess an invariable element, a common essence, and they are such only inasmuch as they are the product of this essence and partake of its nature. And the adversaries of Idealism, the so-called psychologists who pretend to found philosophical knowledge upon internal experience and *facts of consciousness*, as they term them, acknowledge, or must acknowledge, this principle, namely, that in examining and describing such facts it is not as *facts* belonging exclusively to the *individual* self that they describe them, but as facts extending to all selves, nay, as constituting their very nature. And this only can lend to their inquiries a scientific importance; which means that it is this very science—Idealism—which they oppose that furnishes them with a leading principle, and imparts a meaning and a value to their own doctrine.

This misconception of idea in its relation to the Self must be chiefly attributed to the incorrect and deceptive notion we entertain about this same Self and consciousness. For we hold that Self combined with Consciousness, or Self-consciousness, is the highest stage and perfection of the human being, so that, according to this opinion, truth must be apprehended by the Self in Consciousness or Self-consciousness; and a truth which does not fall under Self-consciousness is, as far as we are concerned, = 0. Now, even granted Self-consciousness to be the highest perfection or faculty of the human being, here also it must be admitted that it is not the exclusive attribute of single individuals, but that all individuals are possessed of it; which leads us to the same conclusion we have just stated, that there is a type, an idea, a common essence for self-consciousness, in which idea lies the cause and unity of all self-consciousness, and by which all self-consciousnesses are linked together and set in mutual communication.

Moreover, the knowledge of *my* Self rests on the knowledge of *the Self*, as the knowledge of my nature rests on the knowledge of man's nature. This is the import of the *Γνωθι*

the idea, which appeared to Cuvier as a mere form because of his not having given the subject sufficient attention.

σεαυτόν. For to obtain the real knowledge of my faculties, rights, and duties, I must know other men's also. And to embrace my Self in the wide range of its relations as a physical, social, moral, and religious being, I must know the beings also with whom I stand in such a relation. And if, in examining into my Self, I do not discriminate what belongs to it and what belongs to the Self—what is local and accidental, the effect of ignorance, caprice and opinion—from what is invariable, permanent and absolute in my nature, I shall know neither the Self in general nor my individual Self.*

If we now consider the Self in its relation to truth, we shall arrive at the same result. In fact, truth which would be exclusively my individual Self's truth would prove no truth at all. And if I apprehend it as identical with, or inseparable from, my Self, I pervert it, or apprehend the shadow and not the reality of truth. For the very nature of truth is to be universal, and so constituted as to be open to universal apprehension. Therefore when I say that it is *my* mind which apprehends truth, I use an erroneous expression which creates in me the belief that it is really *my* mind that apprehends it, whilst it is *the mind* that is in me, and with which I am in union, that really perceives it. And, far from my *selfish* nature being the organon of truth, all my endeavors must, on the contrary, be directed towards vanquishing and silencing it, in order to invigorate and give rein to that universal nature that lies hidden in the depths of my soul, and which alone is able to apprehend the universal and the eternal. For when I live with and within the narrow compass of my individual Self, I live amidst fleeting shadows and deceptive phantoms which I mistake for realities, and instead of enlarging and perfecting my individual nature by raising it to the True and the Good, and by actually accomplishing my union with the universal and the absolute, I disfigure

* If any one were to state that *man* is the *Englishman* or the *Frenchman*—or, what is the same, that in possessing the knowledge of the *Englishman* we possess the science of *man*—the *Englishman* himself would smile at such a statement. Now those who pretend that the Self is the highest attribute of *man*, and refuse, at the same time, to admit an essence common to all Selves, hold a still stranger opinion. For the error of the former would only be to mistake the species for the genus, whilst the latter substitute the individual for the whole genus.

and curtail the latter by violently compressing them (if I am allowed the expression) into the mould of my individual and perishable nature. Consequently, to apprehend truth I must abolish my Self-consciousness, and turn it into Unconsciousness, or the Consciousness of Truth. This is the high and exclusive privilege of Truth and of the intellect that apprehends it. For in this mutual embrace of Intellect and Truth, Truth becomes Intellect and Intellect becomes Truth. Now this union and identification is what Thought and Idea alone can accomplish. For Thought that has become adequate to Idea is Thought not only of my individual Self, but of Consciousness and the Self, as well as of the Non-self and of all things as grasped by the mind in their universal and immutable essence.

Analogous considerations will lead us to the idea of *matter*. In fact, if there be an essence of matter, this essence must need be a merely *intelligible* principle. Now there is and there must be such an essence. For even were we to realize the principle of matter in a manner similar to that of Plato's and Aristotle's, i.e. as a principle utterly *passive* and formless (*ἄμορφον*), as the absolute virtuality or indetermination (*δύναμις*), it would be this virtuality and this indetermination, this absence of all forms, and consequently this capability of receiving any, that would constitute its essence.

The habit of representing to ourselves matter as compound and impenetrable is the chief hindrance to our apprehending the simplicity and *intelligibility* of its principle.

Now, with regard to composition, if by composition be meant an accidental and external union, or juxtaposition of elements and properties that would not be united by any internal, simple, and consubstantial principle; in this case, matter is no more compound than spirit. Otherwise we ought to hold that spirit is compound also, as it contains, like matter, various properties, faculties, and modes of activity. If it be said that in matter it is *form* that links together its properties, this would be equally applicable to spirit, and in this respect also there would be no difference between them. Finally, to realize either Spirit or Matter as a merely external and fortuitous aggregate of elements, is to fall into

atomism and all the impossibilities with which this doctrine is beset.

As to impenetrability, it is not only speculative thought but experience itself that shows matter not to be absolutely impenetrable; for, if it were impenetrable, how could the most essential fact—the fact constituting, so to speak, the very life of matter—I mean, its transformation, and the mutual fusion and identification of the various material substances—be explained? Besides, if we admit matter in itself, matter forming the link of all material substances, we must admit also that matter penetrates all these substances, or, what is the same, that all these substances penetrate each other through the medium of matter. Therefore, what is impenetrable is not matter in itself, but matter in its particular and fragmentary existence, i.e. bodies. And, consequently, we must hold that bodies are penetrable and impenetrable: penetrable inasmuch as they possess a common nature and substance, impenetrable inasmuch as they are distinct and separate parts of this same substance. Finally, *extent* and *impenetrability*, as well as all properties and modes of matter, are general and essential properties, and consequently, like matter itself, merely intelligible elements; they possess, in other words, like matter, a principle, a type, an idea.

§ 3. *On Ideas as the Essences of Things.*

If we admit that all things rest on a corresponding idea, the next question is whether idea constitutes the essence of things, or whether there is above idea a higher principle, of which idea would be only the *form*—a force, the inward nature of which we are unable to reach, issuing forth from the divine essence, or, to speak more accurately, constituting this very same essence. This is, I need hardly say, the decisive and crowning point of the problem. All those who have sufficiently attended to the subject concur in admitting that ideas are necessary elements of things, that they are eternal and immutable, and that their origin must be traced to the Absolute. But are ideas so identical with the Absolute as

to constitute his whole Being? Or is there, besides ideas, some principle or essence of which ideas would be only *forms* or *attributes*? This is the point upon which opinions are divided. For, according to some, ideas are only forms, modes, or attributes; according to others, they constitute both the form and the substance—the very nature of the Absolute. Now, the following are the reasons which, in my opinion, establish the second doctrine:

First of all, if it be true, as we have demonstrated, that thought and idea are inseparably connected, so much so that they suppose each other; that obscure force, or that undefinable substance which is held forth as the source and *substratum* of ideas, cannot be thought but through an idea, and an idea which is adequate to it. And, as it is admitted that idea is the *essential form* of things, it follows that the idea of this substance will be its essential form, and as absolute and eternal as the substance itself. The idea of a substance is consequently adequate to this very substance; which means that this substance is *thought* as it *is*, and cannot be otherwise than it is thought. Thus, for instance, if gravity be an essential form of matter, this latter must be attracted towards the centre, and, if gravity thought, it would think itself as necessarily attracted towards the centre. If God is the Perfect Being, or the Absolute Spirit, &c. &c., he must think himself as such, and, *vice versa*, he must *be* as he thinks himself. This shows how deeply idea is involved in the inward and substantial nature of things. And this connection will become still more manifest if we consider the whole idea—I mean each idea in the whole range of its qualities and relations; if we describe and determine, for instance, the various and general properties of the triangle, or of organism, or of the soul. For one cannot see then what other character or substance may exist besides and above idea.

The difficulty we find in apprehending the true and complete nature of ideas is to be attributed, in a great measure, to the arbitrary selection I have pointed out*—a solution circumscribing the sphere of ideas, assigning ideas to one

* See preceding section.

order of beings and withholding them from another, and leading thereby to the conclusion that this latter must rest on other principles than the former. For example, suppose any one admitting the idea of the Beautiful, and that it is this idea which imparts to the work of art its beauty,—if he do not admit at the same time the idea of matter, this he must derive from another source, and in this case the idea of the Beautiful will only possess, in his opinion, the power of stamping matter with a certain form. Again, it will be admitted that the operation of the mind must be performed according to certain fixed and invariable laws, i.e. ideas. But if we do not admit at the same time the idea of the *thinking subject* or of the *Self*, this also must be derived from some other principle or essence than idea, and then the laws or ideas which govern the mind will be only *forms*. It is the same process and mode of arguing we make use of in considering the nature of God; for we will fain acknowledge that ideas are inseparable from God's nature. But here also we argue with regard to God as we do with regard to the Self. And as we refer the Self and ideas to distinct principles, so likewise we separate in God ideas from his being and substance. But if there be the idea of the Self, there must be also the idea of God, and God cannot be and think himself but according to this idea. And when we endeavor to grasp the divine essence, and we think we soar above the sphere of ideas by attributing to God Consciousness, Personality, Goodness, Ubiquity, &c., we in reality are gathering merely ideal elements to build up the nature of God. Now these and similar elements must represent the real and objective nature of God, otherwise we would make up the nature of God of mere words and shadows. And, in saying that *they represent God*, I do not mean to say that they are only symbols or images, but component parts and elements, of his essence. For if we realize the *Being* of God as differing from the *Thought* of God, we are drawn into the same difficulty; and this difficulty does not only affect the human but the divine thought also. In fact, if Being and Thought be separated in God, or if the idea of God be not identical with his essence, the unity of the divine nature will be

broken, and neither God in thinking himself nor man in thinking God will think God, but a shadow of God—in fact, anything but God. Consequently, thought in God, or the thought of God, is identical with his Being; it is his Being intellectualized, if I am allowed the expression. But if there be, it might be objected, as you assert, a stage of existence where *thought* and *being* become identical, the thought of a thing would not differ from its being, and consequently to *think* happiness would be *to be* happy, to *think* the Good would be *to be* good, and so forth. Now this is not only at variance with language, but with vulgar and daily experience, as we think happiness without being happy, and the Good without being good.

This objection, which at first sight seems unanswerable, but which we have already implicitly considered, rests on an erroneous notion of the nature of Science and ideas, as well as on an inaccurate observation of experience itself. In fact, even if we confine ourselves within the limits of experience and of *subjective* thought, we shall see that if the thought of a thing is not the whole thing, it is at least its starting-point or its essential condition. Thus one is not happy and good unless he seeks after happiness and the good, i.e. not unless he thinks them; so that by abolishing the thought of them we would abolish the seeking after them, and consequently their possession and the sentiment attached to it.

However, this is not the proper way of viewing the question; for the essential and decisive point is whether there are absolute thoughts or absolute ideas of good and happiness, and whether these ideas be the principles from which the imperfect and individual good and happiness are derived. It little matters, then, that such individual should think happiness without being happy, or that happiness should assume different forms and vary with the different individuals, or that it be realized only in a certain number of individuals and in a certain sphere of existence. For from the fact of there being an idea of happiness, it does not follow that all must be happy, or that all must be equally so, no more than it does follow that all must possess beauty because there is an idea of the Beautiful, or that all bodies must be luminous because there is the idea of Light. It is rather the contrary

that must take place, and this because ideas determine each other, and can each of them fill up only a limited province and sphere in the whole system.

But here the difficulty principally arises from the mistake created by the confusion of *individual* and *subjective* with *universal* and *objective* thought, or of thought accidental with thought necessary and absolute. To think accidentally the triangle or the solar system is not *to be* either the triangle or the solar system. But the essential point is to know whether, besides the idea, the eternal and objective thought of the triangle or of the solar system, there can be another and higher essence of these beings. And if, to establish this latter opinion, we appeal to individual consciousness and experience, we do not only place ourselves without the pale of Science, but we are necessarily led to a result contrary to that which we aim at. In fact, we will not admit that ideas constitute the ultimate principles of things; and we raise above ideas *being* and *essence*, apparently on the ground that the notion* we form of the Absolute surpasses the region of ideas, and then we transfer to this essence the *data* of psychological experience, and make absolute consciousness in the image of individual consciousness. Now, to form such a conception of the Absolute is to deny it. For if God thinks as I do think in the capacity of a finite and individual being—if my individual consciousness is the type according to which I must represent to myself absolute consciousness,—God is finite and imperfect like myself. And it will be in vain for me, in order to reach the absolute, to combine such imperfect elements, to add to or to subtract from them, or to enlarge them indefinitely, so as to make up by their aggregate the notion of God; for I shall not be able to overstep the limits of the finite and the imperfect. Consequently, the principle to be laid down is not that God is such a thought, or such a will, or such a personality, but thought, will, and

* This shows the inconsistency involved in all doctrine rejecting Idealism. For when we pretend that ideas are not the essences of things we must base our opinion on some rational ground, and this rational ground must need be some *notion* we have formed of essences and principles; which means that in rejecting ideas we make use of them, and that the very arguments and reasonings by which we pretend to overthrow idealism rest on some *idea* from which they derive whatever value they possess.

personality, or the idea of thought, of will, and personality.

Again, the argument which is put forth to prove the distinction of *idea* and *being*, namely, that we possess the consciousness of *thinking*—of *thinking* light, for instance, without the consciousness of *being* light—nay, that we feel conscious that the *being* of light is totally different from the *thinking* of it; this argument, I say, is to no purpose. For, as we have already observed, either there is a consubstantial connection between the thought and the being of light, or there is none. If we admit the latter position, we may say that in the thought of light there is no apprehension of real light but a mere delusion. Moreover, we ought to bear in mind that here the question does not turn upon individual existence, or any contingent and particular phenomenon, but upon essences and principles—a point which we lose sight of when we appeal to observation, self-consciousness, and sentiment. For essences, let them be ideas or any other principles, can be *thought*, but cannot be *felt*. And, far from their coming within the apprehension of sentiment, we must rise above the sphere of sentiment, of observation, and individual consciousness, to contemplate them in the purity and reality of their immutable and eternal nature. Thus, for instance, when we inquire into the nature of the soul, it is not a soul, but *the* soul we purpose knowing; and we do not think we possess the science of the soul until we have attained such a knowledge. And having attained it, it is not necessary that we should *be* such or such individual soul, or that we should *feel* so, to apprehend its being and qualities. On the contrary, the sentiment of the individual soul would dim the perception of the soul, depriving thereby the mind of the criterion by which the individual soul itself can be known. Thus to think the soul, the triangle, light, organism, &c., is, in the highest acceptation of the word, to *think* and to *be* all these objects. And this identity of idea and essence will be more clearly perceived by considering the nature of God. In fact, we hold that God is the ultimate principle of things, of Nature as well as of Spirit; of matter, light, &c., as well as of justice, liberty, good, &c. Now, either these words are destitute of all meaning, or they mean that God is all beings in general

without being any individually, and consequently that essences are merely *intelligible* elements, principles that pure and speculative thought alone can reach, and transcending the region of sentiment, of self-consciousness, and experience.

§ 4. *Idea as the Ultimate Reason of Things.**

If ideas and essences are, as we pretend, identical, it follows that ideas contain the *why* and the ultimate reason of things. Why are there organic beings, or such a function or property in organism? Or, why do bodies move? and, what is the reason why they cannot move but in time and space, swiftly or slowly, or in a certain direction? Why such a phenomenon, or such a sensation? Or, what is the ultimate reason of the union of the soul and the body? The answer to these and similar queries will be derived from ideas, namely, that the body and the soul are united because there is the idea of such a union, and that they are united conformably to such idea; or that there are organic beings, phenomena, movements, because there are ideas of organism, phenomena, and motion. Such a doctrine, I know, we are unwilling to admit, and this for the same reason we object to assigning ideas to all things. Here also we are wont to make a solution, and explain one order of facts and beings by ideas, and another by some other principle. When asked, for instance, why such an action is good, or such a conception right, or such a thing beautiful, we answer that they are so because they are conformable to certain ideas of justice, truth, and beauty; which means that whatever justice, truth and beauty is in them they borrow from these ideas. But if any one hold that the ultimate reason of sensation, of organism, of the union of the body and the soul, lies in ideas, we will not listen to him, and will reject his doctrine as possessing

* I need not remind the reader that in this and the preceding section I have considered all questions relating to ideas in their abstract and general form, and confined myself to showing in a general manner the necessity and nature of ideas without determining the nature of any particular idea, and this because such an inquiry belongs to particular branches of Philosophy. For instance, the idea of Religion belongs to the Philosophy of Religion, as the ideas of time, space, light, &c., come within the province of the Philosophy of Nature. Moreover, the value and meaning of ideas cannot be apprehended unless each idea is systematically deduced.

no meaning, and substituting mere and empty words for real and substantial causes. It is, as we may say, the same inconsistency we fall into. For if we give as ultimate reason of the justice of actions the idea of justice, we must also acknowledge idea as the ultimate reason of the union of the body and the soul; or, if we reject the latter, we must reject the former also. Therefore, for the very reason we admit other ideas, we must admit the idea of the soul and the idea of the body, and then the idea of their mutual communication. All the explanations contrived on the subject—the hypothesis of a *plastic mediator* (Cudworth), or that of *physical influx* (Euler), or that of *occasional causes* (Cartesius), or that of *preëstablished harmony* (Leibnitz)—are but various expressions of one and the same conception, namely, that there is an intermediate principle or essence by and according to which the soul and the body are united. The theories of *preëstablished harmony* and of *occasional causes*, which seem to point to another solution inasmuch as they seem to place the principle of this union in the power and will of God, rest, when attentively examined, on no other foundation. In fact, the divine will is not an arbitrary and contingent will, but finds its rule and guidance in the laws of God's nature, which are nothing else than the very essence of things. And this is proved by the fact, that even those who would attribute to God a contingent will and liberty—a liberty of choice or of indifference, as they name it—are compelled by a rational necessity to place above these attributes the nature itself of God, and acknowledge that God acts, and cannot but act, according to the laws of his nature. Therefore, it would be no explanation, or at least it would not be to give the ultimate reason, to say that the soul and the body are united because God has willed it; but we must go beyond this, and say that he has willed it because this union is conformable to the laws of his reason and wisdom, and that he has willed it but in conformity with these laws: which means, in other words, that there is in God's nature a certain idea, a certain essence, where the two substances are eternally and absolutely united, which ideal union is the ultimate reason of their actual communication. In fact, the ultimate reason of a thing is that internal and ideal necessity which makes the

thing what it is, and that it cannot be otherwise than it is; and this is its essence. And it must be remarked that when we have attained that degree of knowledge, we cannot proceed further and inquire for a higher reason. Thus, for instance, it would be illogical to ask why bodies fall, should it have been demonstrated that gravity is their essence. And all attempts to answer the question would prove vain, or would lead to the begging of the question. This explains also why it is irrational to ask the reason of the existence of God. For God is essence and absolute necessity; and in this respect what can be said of him is, *that God is because he is.*

These remarks may be easily applied to other ideas. Let us take life, for instance. All physiologists tacitly admit the idea of life: for when they investigate the laws of living nature and strive to determine their essential character and condition, it is in reality the idea of life they aim at, as it is this very same idea looming, so to speak, before them that guides them through their inquiry. But being unaccustomed to pure speculation, and unable to set their mind free from images and material representations, they expect to derive from observation and experience that which from speculation alone can be derived, thereby obtaining facts and consequences which they mistake for causes and principles. They are thus led to *materialize* ideas, and to seek the principle of life, some in animalcules (*infusoria*), a kind of material types by which are engendered all living beings; others, like Buffon, in an organic substance spread from eternity through the Universe, and stamped in succession with limited and individual forms. In reality, what they have in view is idea—a purely intelligible principle by which all *living* beings are produced, as all particular good emanates from the Good, and all particular beauty from the Beautiful. Of this principle they possess a presentiment, a glimpse as it were; but they are unable to reach it in their real and absolute existence.

§ 5. *Idea is Force.*

This is a consequence naturally flowing from the preceding considerations. For, if idea be essence and the ultimate

reason of things, it is also force, and the force the most irresistible, which may be called also necessity. The force that produces the plant, and according to which the plant grows and dies, is its idea. The real and absolute germ is not the individual and external germ we touch and see, but the idea by which the external germ is created and endowed with the necessary force for its growth and preservation. The force which every being is possessed of, as well as the *form* or law according to which it acts and displays its powers, lies in its very nature, i.e. in its idea. The difference of forces is owing to the difference of ideas. Matter is a force, and the soul is a force, and, as forces, they are the product of one and the same idea, and both produce similar effects; for instance, the soul moves the body, and a body moves another body. Their difference is to be found in their spècific elements, or in what constitutes their special idea: for instance, space and time, extent, attraction and repulsion, &c., for matter; imagination, will, thought, &c., for the soul. Or, to quote another example, matter in its mechanical and matter in its chemical state are both force, which are only diversified by their specific typical structure. As idea is force, and the source of all forces, so the permanency and preservation of force do not rest on any *quantitative* (mathematical) formula or conception, such as, for instance, the quantitative absorption and reproduction of force, but in the permanency and immutability of its principle. For instance, with regard to the falling of bodies we may ask the question, whence comes the force that makes the body fall, and what becomes of the force that has been thus expended in producing the fall? Perhaps it will be said that the force is inherent in the body that falls, and that the amount of force that body employs in falling is absorbed by other bodies, which in their turn reproduce it, thus forming a circle—an alternate movement of absorption and reproduction, in which, the loss and the gain being balanced, there would be no actual deperdition of force. Now this explanation, even were it correct, does not reach the real and ultimate source of the permanency of gravity. The absorption and reproduction, the *quantity* of force absorbed, and the *quantity* of force reproduced, are subordinate states or forms of force, and are depending on its very

nature and essence. Let us suppose the whole of the force of gravity in the Universe to be = 1,000, and this sum to be equally divided among say 100 masses, and this in such a way as, when one of these masses expends its 10th part, this is to be absorbed and preserved by the others; and, as we may suppose also that each mass is continuously supplying its share of force, there would be in the whole system an uninterrupted reciprocation of forces, absorbed and reproduced. Now it is clear that the permanency of the fact rests on the permanency of the principle that produces it, and that if there be no diminution in the quantity of force it is because its principle—its idea—is liable to no deterioration.

Mathematical formulæ symbolizing the law of gravity, or any other law, possess a real and rational value, in their abstract and general form, on the condition only that they are the expression of an absolute idea, independent of all phenomena of gravity, and to which these very phenomena owe their existence. When we say that force is inherent in matter, we use an expression which conveys a correct idea neither of matter nor of force; for it represents matter and force—or the force that is in matter—as things separable, whereas they are inseparable. Such is, in fact, the ordinary mode of viewing matter and force. We place matter on one side, so to speak, and force on the other, realizing the former as complete of itself, or as possessing its being and its essential qualities without the force of gravity, and the latter as something extraneous and superinduced; and this on the ground that we can conceive matter without such a force, from which we draw the consequence, or rather the assumption, that matter would not cease to exist even were the force of gravity subtracted from it. According to this view, gravity becomes a mere law of matter, as it is called; a certain form imprinted, as it were, upon matter, but neither matter itself nor an essential and component element of it. Now, if we give the subject the proper attention, we shall see that *Being* and *Force* are inseparable; that *Being* destitute of *Force* is no *Being*, and that *Force* possessing no *Being* is no *Force*. By *Being* I mean here that which constitutes a thing, and without which it could neither exist nor be conceived. What to an inaccurate observer often appears as an

accidental or external *form*, is in reality an integral element of a being's nature, as integral as its substance, and consequently is itself a force. For instance, thought and the forms of thought are inseparable, so that thought could neither be or act without forms, nor could these be or act without thought. So likewise in the body form and matter are so interwoven that whatever force is in it springs from the association of both; so much so, that, were either of them annihilated, being and force would be at once annihilated in the body. And so it is with all things. Consequently, gravity, attraction and repulsion, motion, &c., are not *forces* and *forms* added to, but essential elements of, matter; they are not forces acting upon the molecules, as one is wont to realize them, but forces that constitute the molecules and matter.

The doctrine that resolves matter into atoms or indivisible molecules, representing the latter as coalescing under the action of an additional and extraneous force,* cannot be supported on any experimental or speculative grounds. In fact, experience nowhere shows the existence of such elements; indeed, according to experience, matter would be indefinitely divisible, and there would be no such indivisible principles. Nor is the atomistic doctrine more justifiable on theoretic grounds; for either atoms are absolutely formless, or they possess a form—polarity, or weight, or volume, &c. In the first hypothesis, they are phantoms of the imagination, or rather empty words, as nothing could be affirmed or thought of them; not even that they are indivisible, indivisibility being a manner or form of being. If they are endowed with a form, this form constitutes with their substance, and as well as their substance, their inward and inseparable force. Whence it follows—1°. That force is not superinduced, but is one of their constitutive elements. In fact, if we consider extent, or the filling up of space in matter, we shall see that it presupposes both attraction and repulsion, and that it presupposes them as generating principles of matter; for if we suppress attraction there will be nothing to repel, and if we suppress repulsion there will be nothing to attract. 2°. That *force* and *form*, be it *extent*, or *weight*, or whatever it may

* *Molecular forces.*

be, are the common properties of all such pretended atoms, or of all parts of matter; which means that there is a common principle—an idea—from which all parts of matter borrow whatever force or any other quality they possess.

If I have dwelt at some length on the idea of matter to show that idea is force, it is to have the opportunity of pointing out the inconsistencies and errors into which the Philosophy of Nature is necessarily drawn, the arbitrary and artificial theories to which it is obliged to resort when it attempts to explain Nature, its forces and laws, by any other principles than ideas. Yet such is the aversion of the Natural Philosopher to ideas, that he will prefer inconsistencies, or any irrational and untenable theory to Idealism. He must use ideas, for he cannot advance a step without their assistance, and he must use them to prop up his own theories; but he will look with suspicion, nay, with contempt, upon any doctrine teaching that ideas are realities, forces, and principles. Thus, for instance, instead of acknowledging the ideas of organism and generation, he will have recourse to hypotheses such as the engrafting of organism upon organism (*epigenesis*), or to the concentric envelopment of germs (*emboîtement des germes*), or to spontaneous generation (*generatio primaria, spontanea*), or perhaps to the will of God. Now these and similar hypotheses explain nothing, or, if there be any meaning in them, this they draw from some idea, and consequently they are rational and correct inasmuch as and to the extent in which the idea is so. In fact, the will of God, when set forth as the ultimate reason of things, is the *Deus ex machina*, which, for the very reason that it may be used for all purposes, in reality demonstrates nothing. For a principle which may arbitrarily and indiscriminately be brought forward to explain the motion of my arm as well as the motion of the Sun, or any other order of phenomena, is no principle at all, and no Science can be founded upon it. Moreover, the will of God, as we have already observed—and the will of God more absolutely than any other will—must be ruled by law, and by an absolute law, which law is at once the essence of things and a part of God's nature.

As to *spontaneous* generation, if by *spontaneous* it is

meant that things—phenomena, individuals—are produced, or do produce themselves, without any previous and independent cause or principle that produces them, this is equal to saying that they come from nought. In any other sense, spontaneity presupposes a preëxistent principle, and therefore explains nothing. The same applies to epigenetic generation, and to the collateral hypothesis of the concentric involution of germs; for, even granting that the germ be endowed with an inexhaustible power of begetting similar individuals, or that it should contain, like some infinitesimal quantity, an infinite number of germs, such hypotheses will explain neither the initial germ, nor the unity of the species, nor even the grown up and complete individual. For the complete individual is not the germ, and though it may be supposed to be potentially involved in the germ, as the whole picture is involved in its outline, yet there are additional elements, properties, and processes, through which only its full growth can be accomplished. Besides, the germ cannot constitute the species, for the production as well as the relation of germs can only be explained by a distinct and separate principle. To say that the various germs or individuals are issuing from a common stock, and then to realize this common stock as an individual—the various plants from an individual plant, for instance, or men from a primitive man—is to say that this individual being is at once the individual, the species, and the genus. Now let us suppose the fact to be so; let us suppose that there was a primitive germ or individual from which all subsequent germs or individuals have sprung. It is evident that there would have been two natures involved in the nature of such individual, namely, its own individual nature coupled with the common and general, i.e. the species. Now, if we suppress in the supposed individual its individual, limited, and perishable nature, what will be left in it is the common and universal nature, or the generating principle of all subsequent and similar individuals. And if we add to this that the supposed individual must be itself the product of a principle which embraces both the individual and the common nature, we shall arrive at the conclusion that here also idea constitutes the common

stock, and the ultimate principle to which the individual, the species, and the genus, owe their origin and existence.

The fact is, the Natural Philosopher, if consistent, cannot escape Idealism; for he cannot even think force in general, or any particular force, such as gravity, light, &c., without ideas. And, when he comes to consider the *objective* nature of forces, if he rejects Idealism, he will be obliged to adopt *Nominalism*, and to realize force either as an empty word—*flatus vocis*—or, like Kant, as a merely *subjective* form of thought; or to divide force and scatter it into infinitesimal divisions, i.e. to adopt *Atomism*; or to substitute mathematical quantities and formulæ for physical forces;—which means, in other words, that the Natural Philosopher, by rejecting Idealism, raises insurmountable difficulties, nay, he contradicts himself, and brings about a result opposite to that which he is aiming at. For he rejects Idealism on the ground that idea, in his opinion, is not a real principle, an essence, a force, and then he builds up forces and beings with merely *subjective* elements, with empty sounds, or with mathematical formulæ; in other words, with materials either destitute of all reality and force, or deriving from ideas all the reality and force they may possess.*

* *Has vires* (attraction and repulsion), says Newton, *non Physice sed Mathematicè tantum considero*. (Phil. Nat. Princ. Math., Defn. VIII.)—These words show that, in the opinion of Newton, there are two essential elements of which gravity consists, namely, the Physical and the Mathematical. It is not my object to examine here the purport of this division, or whether it is conformable to a strictly rational and scientific method to divide a being, substance, or force, into two parts, to consider one and to leave off the other. Here, confining myself to the present subject, I will only observe that if the Natural Philosopher admit that the mathematical element is an integral part of force, he cannot without inconsistency reject Idealism, as the pure mathematical element is nothing but idea. If, on the contrary, he consider force as independent of mathematical notions, his formulæ and combinations possess no value whatever, nay, they are delusive and fallacious, as they create the belief that mathematical notions constitute a real element of force. (See on this question my *Introduction to the Philosophy of Nature*, of Hegel, vol. 1.)

CHAPTER V.

§ 1. *Idea in itself and without itself.*

If idea be the essence and the ultimate reason of things, it necessarily follows that it exists in itself and without itself, or, to use another expression, that it exists in thought and out of thought in Nature, and that it does not exist out of itself and in Nature as it exists in itself and in thought. However startling and irrational this proposition may appear at first sight, it will be perceived, when properly considered, that it must be admitted under any supposition, and from whatever point of view we look upon the subject; nay, that we admit it in many instances, only we admit it, in another form, unconsciously and in a desultory and unscientific manner.

The popular sayings that God is the principle of the World, but that he is not in the World; or that idea and its realization, theory and practice, though connected by a close relation, are distinct and cannot become identical; or that the artist perceives idea, but is unable to embody it in all its beauty and perfection; or that Nature and the visible world are but images and symbols of the invisible,—all these and similar propositions are but various expressions of one and the same principle, namely, that idea is in itself and without itself in the things of which it is the idea, and that it is not in the things as it is in itself. For when we say that God is the principle of the World, but that he is not in the World, we do not mean to say that there is no *consubstantial* connection between God and the World—there is no proposition more untenable and more absurd than this—but that God, who is the principle of the World, exists in a two-fold manner, namely, in himself and without himself, and that he does not exist in the latter as he exists in the former manner. So likewise in saying that the visible world—the world of phenomena—is only the image of the invisible one, we mean that the latter manifests itself but imperfectly through the former, as sound or any outward sign is una-

ble to represent thought in the clearness and fulness of its meaning, though both sound and thought are linked together in the same subject.

What language is to ideas in general, the external world is to Art. Languages as well as works of Art are symbols, imperfect and obscure adumbrations of ideas. They embody ideas, or, to speak more correctly, ideas embody themselves in them; but as the body both manifests and veils the soul, so ideas, by giving themselves an external existence, must need create Nature, or bring themselves in contact with Nature, and consequently dim the purity and transparency of thought, and conceal the unity, the infiniteness and immutability of this essence. For Nature is time, space, and motion; it is the field of perpetual change, of ever-recurring renovation and destruction; where everything is not only dissimilar to another but to itself at each moment of its existence; where beings and forces form mere aggregates, and are merely juxta-posed, without being internally connected, and conscious either of themselves or of the relation in which they stand to each other.

Therefore the Being that either creates Nature, or uses Nature as a means, or stands in any relation to Nature, must needs partake of it, and adapt itself to its laws and constitution. Thus what in itself is one and undivided must become plural and divided, what is immutable and eternal must become mutable and temporal, and what is beneficial and harmonious must be made to appear hurtful and inharmonious. This is the relation in which ideas and Nature stand to each other, a relation involving a contradiction, an affirmation, and a negation.

It may be said of God that he affirms Nature inasmuch as he is the principle of it, and that he denies Nature inasmuch as Nature cannot contain him. And so it is with thought and ideas—God, Thought, and Idea, being identical in the highest sense of the words. Consequently we stand, like God, to Nature in a similar relation. For inasmuch as we are thinking beings, and bear an ideal world within us, Nature cannot contain us; so that we also affirm Nature—we live in it, we adapt it to our wants and purposes, and associate it with all our works and enterprises, and all our enjoy-

ments and sufferings; and then we destroy it as a useless and unmeaning instrument, and as a hindrance to the furtherance of other purposes and the attainment of other enjoyments. The inward and inextinguishable yearning after something better, absolute perfection; the feeling of discontent and weariness which is inseparable from all human things, however accomplished they may be; progress, reforms, revolution—history, in one word—is the work of the ideal world that is in thought, and which the external world is unable to express and realize. The working of thought is unceasing; nay, it is the very life and essence of History; and the appearing and disappearing of individuals, nations, and civilization, are but its actual results—the only results visible to the external eye, and to the inattentive mind to which the latent causes are hidden—by whose incessant and combined action events are brought to maturity.

This alternate movement of life and death, of renovation and destruction, of adaptation of Nature to the requirements of Spirit, and of annihilation of Nature, is the work of ideas and thought, which, like the double-edged weapon of the Greek hero, inflicts the wound and heals it; showing thereby their infinite and irresistible power, before which Nature is something like nought—an instrument they create and annihilate at will and according to their purposes. This power may be seen at work incessantly, and in every part of time and space; but never is it more visible, or surrounded with more tremendous attributes, than in those great historical changes and revolutions when the times are full for humanity to advance another step in the consciousness of itself and in the path of truth. Then we see the world thrown into, as it were, a state of disruption and confusion. We see beauty becoming ugliness, wisdom folly, truth untruth, patriotism and heroism sterile and powerless virtues, and institutions upon which had been bestowed the thought and labor of centuries and generations, and which in former times had proved a source of strength, of glory and triumph, now turning into a source of weakness, defeat, and humiliation.

The middle ages are looked upon as times of barbarism. And it must be owned that when compared with the Greek

and Roman civilizations, with their extraordinary men and achievements, and the imperishable monuments raised by them—monuments from which we derive, even now, the highest instruction and the purest enjoyment, nay, which will live as long as there will be a human mind to admire and revere them;—when compared, I say, with these high civilizations, the middle ages are rightly called times of darkness and barbarism. For if we consider them separately and apart from the general movement of history,—if we consider their institutions, their languages, and the moral, social and intellectual state of their societies, even taking Christianity into account, we are perplexed to see what humanity had gained by the overthrow of the ancient world. And yet the middle ages prevailed against ancient civilization, and they prevailed because the new spirit of the world was with them. As life begets death and death life, as the organic being must fall into a state of inorganism and corruption to bring forth a new organic being, so ancient civilizations—their forms, their creeds and institutions—what in other times they held as true and holy, what had inspired their bards with immortal strains and had been the main-spring of great actions—all must be broken and dissolved.

The middle ages are the new-born infant whose birth is death to its parents; they are the plant and the flower that break to a new life through the rotten seed and feed upon rotten matter. The darkness that surrounds them is the darkness that precedes the new morning light, and the state of violence, instability and confusion into which societies were thrown at that period, is the chaotic state that must precede all new birth and formation; it was the crucible in which were melted the elements of the old world, to be mixed afresh and purified by the breath of the new Spirit. And so it is, under various forms and in various degrees, everywhere, in all points of time and space, and at all periods of history. Everywhere there is life and everywhere there is death, everywhere there is darkness and everywhere there is light springing out of it. What is the darkness and light of to-day is the light and darkness of the morrow, and what is or is not to-day shall not or shall be to-morrow. This perpetual change in Nature, these evolutions and invo-

lutions of forms and beings, this passage from being into nought and from nought into being, visibly demonstrates both that idea—the Absolute and the Eternal—is in Nature and that it is not in it. For idea alone can work the change either in destroying or in producing the being, and it can only work it from its being itself impervious to all change, diminution, and destruction. Whence it follows also that the Absolute exists and can be apprehended but imperfectly in Nature, and that it is as pure thought only that it exists, and through pure thought that it can be apprehended in the reality and fulness of its essence.

In the above remarks, if properly applied, will be found the elucidation of objections directed against Idealism from a sensualistic point of view. It is said, on the one hand, that ideas do not possess any *positive*, but a merely *negative*, value and existence, and, on the other, that they cannot be reconciled with the infinite variety of beings, institutions, creeds, and opinions. How is it, it is objected, that if there be one and the same idea for one and the same class of beings, ideas vary with individuals, times, and external conditions; that Europeans and Chinese, for instance, form different notions of beauty; or that different peoples take different views of right, of justice, and religion; nay, that individuals belonging to the same community and nursed in the same doctrines hold conflicting opinions upon one and the same subject?

With regard to the first objection, it may be easily perceived that it is founded on the assumption that the only *positive* (which here means *real*) beings are those that fall under the senses, which is the sensualistic assumption, and, consequently, that ideas possess no reality—the meaning we must attach here to the word *negative*. In fact, if we start from the principle that nothing save that which falls under the senses possesses reality, then idea would possess no *positive* existence. But to assume that ideas do not possess any positive and objective reality because we cannot picture them to our imagination, or embody them in any external form, is to assume that the only real beings, forces, or principles, are those that can be apprehended through the senses. For the argument does not only apply to ideas, but to all principles in general, as there is no principle, whatever be its nature, its

object, and the notion we form of it, that can be brought under the senses and imagination; indeed, it is contradictory to the very nature of principle to be sensibly representable. For as soon as a principle falls within the limits of experience it is no longer a principle. And we may observe, by the way, that it is on this erroneous view and assumption that not only the sensualistic, but the Kantian doctrine also, is founded; the real and main purport of Kant's theory being that we are not rationally allowed to affirm metaphysical and transcendental realities, because we do not meet in the field of experience with any being or phenomenon which we can bring these transcendental realities to coincide with. Thus, for instance, according to Kant's argument, we cannot demonstrate the existence of God, or of the *Perfect Being*, because the *objective reality* of the Perfect Being is not contained in the *notion* of the Perfect Being; which means that the notion or the Idea of the Perfect Being possesses no objective or actual reality. As the precedent inquiries show the untenableness of this and similar positions, I will not enter again into a lengthened discussion of the question, but I will confine myself to a few remarks.

The sensualistic as well as the Kantian doctrine starts, as we have just observed, from the assumption that the only *realities* are those that come within the reach of the senses and imagination; from which the inference is drawn, that, as ideas can be neither *felt* nor *imagined*, ideas possess no reality. But then the question arises as to what ideas may be; and how it is, if ideas are equal to nought, that the external world cannot be apprehended save through ideas, and that there is no being which our mind, or any mind we may possibly conceive, can apprehend without ideas. Must we say that the phenomenal world which is apprehended through ideas is the highest, nay, the only reality, whilst ideas by the aid of which the latter is known would be destitute of all reality? But it would seem that it is the contrary we ought to admit. For to ideas, through which not only a single individual being, but all similar beings are, and can possibly be, thought and known, must need appertain a higher nature than these beings themselves. Besides, it will be acknowledged, under any supposition, that phenomena

are manifestations and effects of principles, and that these principles must be possessed of a higher reality than their effects. Now, principles, whatever they may be—let them be called God, or the Absolute, or the Infinite—cannot be made the object of sensible perception any better than ideas, as we have demonstrated. In fact, the highest reality is the invisible reality, which is the highest for the very reason that it does not fall under the senses and the conditions to which all external reality is necessarily submitted. Therefore, to hold that ideas possess no reality because this reality is not proved by experience, is to hold that the Infinite does not exist because it does not exist like the Finite, or because the reality of the former is not the reality of the latter.

As to the other objection, drawn from the variety of opinions, customs, and institutions, as well as the products of Nature, it will be observed that the difference does not affect idea, but its external manifestation. Viewed in itself and in its essential existence, idea is one and the same, and is not liable to either alteration or division. It is only as Idea in Nature that it assumes various forms, and that its unity appears as broken and as a plurality. And yet even variety reveals the unity and the infiniteness of ideas. For the numberless individual forms and the ever-changing scene of external objects show the inexhaustible activity of this principle, whilst the invariableness and community of their essential character show its unity. It is one and the same thought that stamps Nature with different marks, it is one and the same mind that manifests itself in the variety of its works. The difference between Chinese and European, or between ancient and modern Art, does not reach this principle. For were they sprung from different sources there would be no relation between them, nor could they be compared; nay, one of them could not even come within the same denomination. And so it is with laws, institutions, and languages. This difference begins with their external manifestation—the temporary, limited, and local forms in which they are necessarily embodied. As one and the same sun produces different effects according to different latitudes and to the different elements with which it is combined—as one and the same object multiplies with the points from which it

is viewed and the eyes that view it—or as one and the same voice awakens different feelings in different ears and different hearts,—so likewise, and in a still much higher sense, idea, in its contact with Nature, splits itself into infinite forms and numberless beings.*

The most striking illustration of this self-diversifying power of ideas is supplied by language. Of all external manifestations of ideas, language is one of the most perfect. Its affinity to thought is so intimate, that some have been led not only to confound them, but to see in language the origin of thought.† In fact, language is the most immediate offspring of the ideal world; it is the echo which externally reverberates the internal sound and breath of Spirit. In other stages of its existence Nature is dumb and silent, and where it possesses a voice it is a voice whose meaning is obscure, undefined, and destitute of all connection and unity. Thus it may be truthfully said that we are the organs of Nature, and that Nature speaks through us a language superior to its own essence, attaining thereby, even externally, a perfection which it does not possess in itself. The roaring of thunder has no meaning for the thunder, or for Nature in general, so long as it has not reached the region of Spirit, and has been marked with an external sign conveying the internal signification of the phenomenon. Likewise the roaring of thunder, the whistling of wind, the flashing of lightning, &c., are scattered and isolated sounds that find their connection and unity in the voice of Spirit. Even the animal—the brute creation—though possessing a soul and a voice to give utterance to its internal wants, is refused a language; and this, because the animal, though the product of the same principle as man, does not bear it within itself, and consequently does not perceive it or feel a desire for it. Being thus debarred

* "*Et erat Lux vera quæ illuminat omnem hominem venientem in hunc mundum.*" Now this light which embraces man, though one and the same light, does not illumine him in the same manner, but adapts itself to space and time and to local requirements. Even within the pale of Christianity, this inward and eternal light is externally broken up into fragments, sects, and denominations, which represent as many aspects of one and the same thing.

† Hence the superficial theories of Condillac and M. de Bonald, summed up in the well-known propositions, "*Penser c'est parler*" (to think is to speak), and "*La science est un langage bien-fait*" (Science is a well-made language).

from the contemplation of the ideal world, the animal is invariably kept within the bounds of Nature and of a limited number of physical wants, for the manifestation of which a limited number of inarticulate sounds are required; and as Nature is by its very constitution the field of uniformity, of unchanging, ever-recurring and self-repeating wants, the animal's wants as well as the mode of expressing them must be invariable. But the being that possesses thought—and the thought of the Eternal and the Absolute, and of the Unity of the Universe—must also possess a means adequate to the outward expression of this internal world. And this is language. The highest and final object of language is not to associate men; for language is like ideas, the double-edged weapon which associates and dissociates men, engenders both peace and war, and creates and overthrows societies; but to give utterance to the internal world of thought, or to express ideas, and, by expressing ideas, to unite and disunite men, to found and overthrow societies, according to the requirements of truth. Now, as language is the most immediate and direct product of thought, it must imitate thought; or if it must imitate Nature, it is Nature as it reflects itself in thought. Indeed thought transfers at will, and according to its own perceptions and purposes, the internal world into the external and the external into the internal; for in this double sense language is metaphorical. But the creative power of thought in language is mainly shown by this, that words cannot represent things except through thought; that they possess no other meaning, or being, but that which thought imparts to them; that it is from thought they derive their beauty, their power, and duration; and that as soon as thought retires from them they become a dead letter, a soulless body.* Thus the same sounds which in former times

* The less language is *representative*, the more correct, faithful, and appropriate to the free and full manifestation of thought. Even in poetry, figures and images must be made subservient to ideas. They must not be the *literal*, but the *ideal*, transfer of a natural phenomenon to the thing we want to describe; so much so, that, if a literal construction were put upon the words, the intention of the poet would be perverted or become unintelligible. If, for instance, we were to take literally the words *βοῶπις*, *κύνα*, *ἀργυρόπους*, &c., Greek goddesses, nymphs, and heroes, would become unseemly or ludicrous objects. The letter of the word must, then, be *idealized*, i.e. must be diverted from its natural sense to that of the ideas the poet intends to express through it.

had delighted the ear, had stirred the soul, and been the incentive to mighty deeds, lie now unmeaning and powerless; or, if they still retain some of their former substance, it is because they enshrined thought, or because we ourselves infuse into them a breath of the living Spirit. Here we can see the common source of all languages, as well as the cause of their diversity.

In fact, if thought is the soul of the word, the internal *verbum* by which the external is created, thought is the principle of all languages, and it is because languages all flow from this same source that thought is able to understand them all. Therefore, the unity of languages does not lie in any primordial language, but in the unity of thought and ideas expressed by words. Whatever explanation may be contrived of the origin of languages, it is towards this common centre that all suppositions and inquiries must ultimately converge. For, either man has taught himself, or he has been taught to speak. In the first hypothesis, language is evidently the product of man's thought and ideas. If, on the contrary, language was communicated to him, in whatever manner the communication was made it must be admitted that the being that made the communication thought what he communicated, and that the communication was the product of thought and in conformity with it; and, on the other hand, that the being which received the communication possessed thought, and thought consubstantial with that of the being by which the communication was transmitted, and that he spoke also in consequence of that thought and in conformity with it. In other words, he who teaches and he who is taught must possess a common nature; and the higher the teaching, the more intimate and inseparable the connection must be; so that, if I teach either to *speak* or to *think*, my teaching would be of no avail; in fact, it would be no teaching unless the being I teach possesses the very same *faculty* of thinking and speaking I use in teaching him. But if he possess this faculty, my thought and his thought, my and his vocal organs, flow from one and the same principle, from one and the same essence. This is the *idea* of language—an idea in which the internal and the external, thought within and thought without itself, are intimately and

immediately connected. For to speak is neither thought without voice, nor voice without thought, but thought and voice penetrating each other and forming an indivisible whole. As the body is the external form and instrument of the soul, so the word is the external form and instrument of thought. Thus viewed, language appears as the highest form of external existence, as the highest degree to which Nature can attain. The other powers and functions of the body are limited in time and space, and mainly intended for the satisfaction of physical appetites or inferior wants of the soul; whilst language, being in immediate intercourse with thought and issuing directly from it, strives to become identical with it; and as thought is absolute, eternal, and immortal, so there is in language an inward effort, a longing after perfection, eternity, and immortality. Yet it is a longing which shall never reach its object. For the word being a sound and an image of thought, and not thought itself, i.e. falling within the sphere of Nature, must, like all images, be limited, perishable, and deceptive. Hence the dispersion of thought in various languages. Hence the necessary transformation and dissolution of languages. Hence also the errors of which language is the source.

In fact, as there are two elements involved in *the word*, the internal and the external, the idea and the sound; and as the sound, which is imperfect and finite, cannot render idea, which is infinite, in the unity and fulness of its essence,—it follows that thought creates another sound, other vocal forms and combinations, to express this very same idea; which forms and combinations, being themselves necessarily limited, prove inadequate for the expression of thought, and call, in their turn, for other forms, which fall under the same conditions as the former, and so forth. Now, if we contrast the various languages, we shall see that, for the very reason that they are limited and external embodiments of thought, each of them must represent a different aspect of one and the same thought, different relations and combinations of one and the same idea; so that what one expresses, the others will be unable to express, or to express in the same manner, with the same degree of clearness, accuracy, and perfection—a fact we experience in translating. For not only is a translation always dissimilar or inferior to the original, although both

the original and the translation spring from one and the same thought, but it frequently happens that both the original and the translation are utterly inadequate to the rendering of thought; so that here we can discern, and feel, as it were, thought in itself in the unity and perfection of its existence, and thought without itself in the limited form in which it is externally clothed. This finiteness of languages, which, by stamping limited forms with ideas and by concentrating thought in a limited number of sounds; is, on the one hand, the source of their power and beauty, and, on the other, the source of their transformation and decay. For, in consequence of their inability to embrace and express the infiniteness of thought, they must either modify and transform themselves, or, if they do not possess the necessary vitality and aptitude to embody the new developments and wants of Spirit, they must disappear and make room for other and more appropriate organs of truth.* For this same reason

* Ut silvæ foliis pronos mutantur in annos.

Prima cadunt: ita verborum yetus interit ætas;

mortalia facta peribunt.

Nedum sermonum stet honos et gratia vivax.—*Hor. Ars Poet.*

As a general criterion, it may be laid down that as soon as a language ceases to be spoken it ceases to be a *living* being—the representative of the living Spirit. Yet a language, although inwardly dead, may continue to be spoken by keeping up a kind of factitious and galvanic life, within which the soul of the present and living spirit of the world does not beat. The Eastern languages, the Chinese, and the Hindoostanee, may, in this sense, be considered as dead, though still spoken by millions and hundreds of millions of human beings. Indeed, in the eyes of History, they are more dead to Science and civilization than Latin and Greek, which we inhale, as it were, from the cradle with our native tongue. They are to Greek and Latin what Oriental history—i.e. Philosophy, Science, Art, Law—is to Greek and Roman history in general. The study of Oriental languages possesses, like any other study, its usefulness and importance, and may also be required for political or commercial purposes. But it could never be a substitute for Latin and Greek, and it would be irrational and anti-historical to make Chinese and Hindoostanee the basis of classical education in the room of Greek and Latin.

In considering the history and present state of the Eastern nations, it must be borne in mind, that, though still in existence, they in reality belong to the past, to the ancient world, where they were far outshone by the two great luminaries of that period. Since that time, whilst the European and Occidental nations, inheriting the spirit of their forefathers, have been fighting the battle of civilization, promoting the common interests, and raising the common level of mankind, the Oriental nations have stood immovable, and kept aloof from the movement of history. So they are, in substance, what they were two thousand years since, and as, two thousand years since, we have seen a handful of Europeans conquer

language is a source of error and delusion, and may become a hindrance to the progress of science and truth. Language is fallacious, not only when *false* representations are embodied in words, but even when words—single or combined—express right notions and real objects. For from the fact of the words being limited and disconnected symbols of things, they represent a part of a thing instead of the whole thing, or as divided and plural what is united and one*; so that the mind, which is guided by the literal and conventional signification of the word, considers as a whole what is only a part,† or as divided what is united.‡

them and hold them in subjection. Therefore, their language and institutions possess only an interest for the antiquarian and the historian.

With regard to the Greek and Roman languages, it is a remarkable fact that they continued to be written and spoken long after the Greek and Roman nationalities had ceased to exist. This is owing to Christianity having adopted the two languages as organs of its doctrines and teaching. The unsettled state of the world in the middle ages, the absence of any newly constituted nationality and language, coupled with the high degree of perfection to which the Greek and Latin languages had been brought, made it necessary for the Church to adopt them. And as, on the other hand, the Church, especially the Latin, was at that time the representative of the new Spirit—a spirit embodied in a Code upon which the nationalities then in a state of formation were to be founded—and, moreover, as Science and Law were so intertwined with Theology as to be inseparable from it—the very fact of the Church having adopted them must have prolonged their existence. For the Church constituted, in some manner, their centre and nationality. Then came the *Renaissance*, which infused again into them some of their native vigor. However, as the new nationalities, and the languages sprung up with them, were developing themselves, assuming a fixed and individual shape, and attaining maturity, Greek and Latin became more and more dead languages. The Reformation, the popular use of the Bible, Science asserting its independence of the Church and using the vulgar tongue, the daily press, the necessity of a more rapid intercourse between men and nations, new discoveries and wants, physical and mental habits requiring new signs and forms of expression,—all these causes must have made and are making ancient languages more and more foreign to our mental and social requirements, however beautiful—nay, even superior, in some respects, to those by which they have been superseded—ancient languages may be.

* Or *vice versa*.

† For instance, the expressions, “My hand presses upon the table,” “That body adheres to that other body,” “The Sun attracts the Earth,” when taken literally and according to the usual representation of the meaning involved in them, convey to the mind the notion that by representing to ourselves the hand *pressing* upon the table, or body A *adhering* to body B, or the Sun *attracting* the Earth, we conceive and embrace the whole phenomenon or law, whilst we perceive only a part of it. For in the phenomena of pressure, adhesion, and attraction, not only the hand presses but is pressed upon, not only A adheres to B but

But what chiefly brings about the decline and dissolution of languages is that a time arrives when not only they are unable to accomplish the object for which they are instituted, namely, to express truth and to spread and promote science, but they become the most stubborn opponents of truth and science. The language of a nation is part and parcel of its being. The long usage and elaboration of a language bring this result, that, whilst they evolve all their native vitality and beauty, and create a more perfect instrument for mental operations, they gradually petrify the mind by encompassing it within fixed sounds and forms, so that the words and thought become identified, and local, limited and imperfect truth becomes the universal and absolute truth. The god of the Romans was not the invisible and eternal God, but the *Jupiter optimus maximus*, seated in all his majesty and glory on the Capitolium, surrounded

is adhered to by B, not only the Sun attracts but is attracted also by the Earth; so that the right perception of the whole object is not in the perception of either term considered singly and apart from the other, but in the perception of both considered singly as well as in their mutual connection—the two conditions of *pressure, adherence, &c.*, and without which such phenomena could not take place. “The whole is made up of parts” is another expression producing a similar error, as it makes one believe that in possessing the parts one possesses the whole, whilst, in reality, the whole and the parts are different, though inseparable. Similar expressions can be easily found.

‡ The natural tendency of language is to separate what is united, thereby preventing the mind from perceiving the internal unity of things. Words, being images and external representations of thought, resolve themselves into sensations; and as the natural tendency of sensation is to divide and to circumscribe, in time and space, both the subject that receives the impression and the object that produces it, so it is with words. Thus, unless the mind—disregarding the word, so to speak, and going beyond it—directs its attention towards the objective and invisible connection of things, the Universe will appear as made up of fragments, of units or atoms. For instance, the words *luminous, opaque, Sun, Earth, motion, rest, cause, effect, general, individual, will, imagination, reason*, taken singly, or even united in propositions, such as “The Sun is luminous.” “The Earth is opaque,” “The cause is not the effect.” “The effect is not the cause,” “The general is not the individual,” &c., offer to the mind a series of merely opposite or disconnected beings. It has been already observed by Condillac that language is an *analytical process—un moyen d'analyse*. In reality, if we consider the word—the external sign of thought—in itself, language is neither an analytical nor a synthetical process, as it is thought that divides and unites. But, from the very fact that the word is a limited and particular representation of ideas, it has a tendency towards distinguishing and analyzing; so that the mind, from inadvertency or from an inadequate philosophical training, misled by the word, is apt to overlook the connection of things.

with the *Dii majores* and all the attributes and formulæ which constituted the Roman religion. So likewise morality, justice, glory, eloquence, were for the Roman inseparable from the words and sounds that expressed them and the national meaning affixed to them, nor would any other sound move his heart or captivate his ear. Consequently, when by the inward and incessant working of thought a new Spirit breathes upon the world, and new wants and aspirations issue forth from the depths of the mind, the old sounds and formulæ in which are embodied the institutions, the wisdom and life of a nation stand up in formidable array to oppose them as false, pernicious, and impious. And it may happen that the higher the civilization of a people, the more obstinate the opposition. For glory and power beget pride and stubbornness, harden the heart, and blind the mind, and lead gradually a nation to the belief that she is the representative of the absolute truth. In this delusion mainly lies the cause of her decline and dissolution. For in this contest between the limited and mortal spirit of a nation and the spirit of the world—which is the Spirit and Providence of God—the former must either follow or succumb. It must either become the apostle of the new doctrine and the organ of the new truth, or, if it be unable to utter the new sounds and spell the new words, it must withdraw from the contest and yield up the arena to a more youthful, more vigorous, and God-inspired race.

Since language, which is the most direct and faithful external manifestation of thought, is unable to render it in all the depth and fulness of its meaning, it follows that thought can only be apprehended by thought and idea by idea; and that words, images, representations, whatever they may be, are but imperfect and deceptive adumbrations of truth. If, therefore, in listening to words, the mind, instead of fixing its perceptive power upon their objective and internal value, let itself be captivated by the sound and by its outward form and beauty, it will mistake the shadow for the reality, the image for the thing, and the perishable for the eternal being. For the Absolute is unutterable, and there is no language that can adequately express it save the internal and silent language of thought, a language which is the reverse of the

former, and that can only be spoken by him who is able to forget his native and mortal and learn the universal and immortal tongue through the contemplation of ideas as perceived in the reality of their nature and existence, i.e. in their unity and as a system. For this is speculation, or speculative thought, in the strict Hegelian sense; as speculative thought is not the thought which apprehends abstract ideas, ideas in their isolated, partial, and fragmentary existence, but thought that apprehends ideas as they are in the absolute idea, which is absolute for the very reason that it is a systematic unity without which nothing can either rationally be thought or exist.

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ROSENKRANZ—(1) *Critique on Second Part of Goethe's Faust*; (2) *Critique on Goethe's Social Romances*; (3) *Letter on Hoffmann and Baader*; (4) *Critique on Goethe's Story of the Snake*; (5) *Introduction to Hegel's Encyclopædia*; (6) *On Hegel's Phenomenology of Spirit*; (7) *On Hegel's Logic*; (8) *On Hegel's Philosophy of Rights*; (9) *On Hegel's Philosophy of History*; (10) *On Hegel's Psychology*; (11) *Pedagogics as a System*; (12) *On Hegel's Æsthetics*; (13) *On Hegel's Philosophy of Religion*; (14) *On Hegel's History of Philosophy*.

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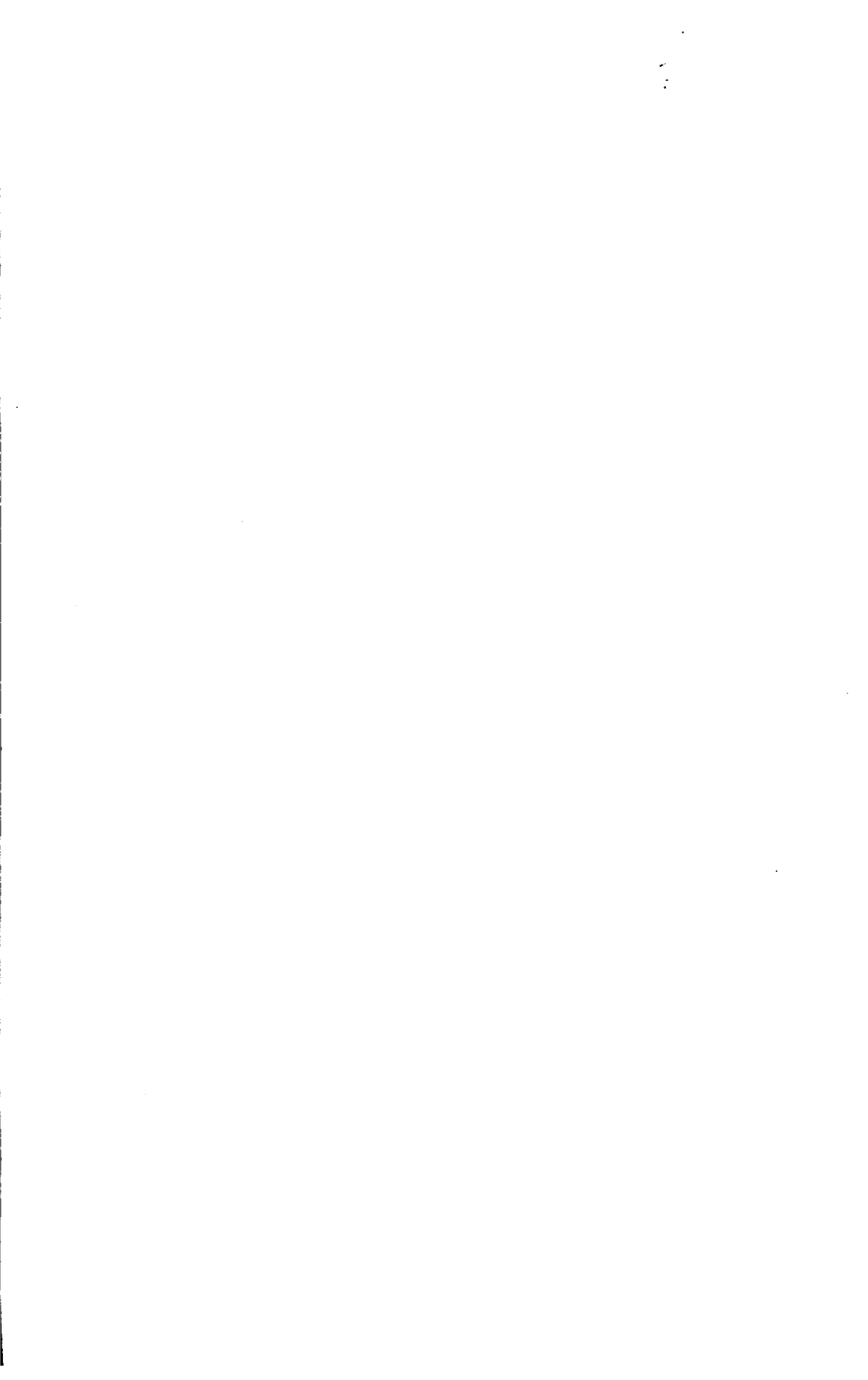
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